

# The passenger pigeon. Vol. 70, No. 4 Winter 2008

Madison, Wis.: Wisconsin Society for Ornithology, Winter 2008

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Journal of the Wisconsin Society for Ornithology



# T PASSENGER PIGEON Vol. 70 No. 4 2008

#### WSO website: wsobirds.org

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Front Cover: This Green-breasted Mango made national birding headlines in September of 2007 by coming to the home of Joan Salzberg near Beloit in Rock County. It is shown here by Scott Franke on its favorite perch in Joan's yard.

#### **WSO's Mission**

In preparation for this "President's Statement," my first as WSO President, I thought it would be a good idea to take a look back at what previous WSO Presidents have written in this space. So, I pulled out all of the Passenger Pigeons from the last five years and read the various messages from Noel Cutright, Jeff Baughman, and Dave Sample. Then, because this was such an interesting exercise, I pulled an additional five years of Pigeons and read statements from Jim Anderson, Sumner Matteson, and Bill Brooks.

The first thing that hit me as I read these messages was that I have huge shoes to fill! The devotion, caring, and thoughtfulness shown by every one of these past presidents is remarkable and is a bit daunting to say the least. The other learning from this exercise is that the topics and form of previous messages were varied and showed no pattern or "official" protocol that I must follow. There were many great topics and messages. Some were about specific issues or causes, others had a "current events" theme, many contained thank you's, and others were simply musings about whatever. One of the things I didn't see, however, was a thorough review of our mission as an organization. So, that is where I will begin.

In the business world, a mission statement answers the question, "Why does your company exist?" Our organization has a couple of good statements of why we exist. Article II in our by-laws states the purpose of WSO as follows:

"The purpose of the corporation shall be to encourage the appreciation and study of Wisconsin birds through programs in research, education, conservation, and publication."

Further, our informational brochure states:

"The Society was organized in 1939 'to encourage the study of Wisconsin birds.' The aims have since expanded to emphasize all of the many enjoyable aspects of birding and to support the research and habitat protection necessary to preserve our Wisconsin birdlife."

And our tagline is:

"For the birds and birders of Wisconsin."

In my opinion, these are good statements of why WSO exists. They are brief, to the point, and serve to broadly define our activities.

More important than the mission statement, though, is what we do as an organization and as individual members to support and satisfy that mission statement. Our brochure states that we "do" the following:

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- ◆ Land Acquisition/Conservation
  - Prairie-chicken habitat
  - Honey Creek Natural Area
- ◆ Activities
  - Field trips
  - Honey Creek/Cox Nature Center
- **♦** Publications
  - Passenger Pigeon
  - Badger Birder
  - Books and birding materials
- ♦ Services
  - Bookstore
  - Hotline
  - Conservation issues
- ◆ Events
  - Annual convention
  - Birdathon/Bandathon
- ◆ Education and Research
  - Many items listed

This list of activities and services is a very strong list; it is one that we can and should be proud of as long as we can live up to the expectations that it creates. And, of course, living up to those expectations is our greatest challenge moving forward.

WSO has a great track record of living up to our stated mission. But, as in any organization, our challenge is to maintain that high level of execution as we step into the future. This is becoming more and more difficult as the world changes around us. The words that come to mind when I think about our execution challenges include:

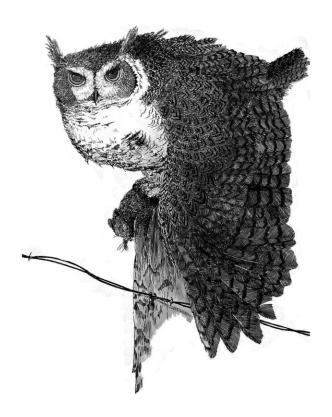
- 1. Visibility—If people do not see who we are and what we do, we do not exist.
- 2. Accessibility—People have many priorities in their lives. If people, both members and potential members, cannot easily "get to us," they may not try.
- 3. Energy—Within WSO, we must have critical mass to sustain ourselves.
- 4. Relevance—We must change to keep up with the ever-changing world. How do we make WSO and Wisconsin birds more relevant to the younger generations?
- 5. Money/Funding—We are in strong financial shape now and we must remain financially strong to "compete."
- 6. Value—People will only buy the WSO "product" if there is a perceived return on their investment.

At the WSO convention in Mequon this past May, I received some great suggestions regarding how to engage the younger generation (see "Relevance" above). I appreciate that input and we will be discussing those ideas at upcoming board meetings. Recently, we have had some issues with the reliability of our

website (see "Accessibility" above). To correct this issue, we have moved our website to a different host and we are performing a review of the website to understand improvement opportunities and related costs. These are just two examples of how your input helps us to continue to fulfill our mission. Let me assure you that all of your ideas, participation, and energy are welcome—no, **VITAL**—to the successful execution of our mission.

As incoming President, I pledge to do my part to ensure that WSO continues to perform at the high level of execution that our mission demands, taking into account all of the challenges just stated. I ask each of you to help WSO fulfill its mission, as well. What ideas do you have to increase our accessibility, relevance, and/or value? How can you help WSO to be more visible and/or energetic? Please feel free to contact me or any of WSO's caring and dedicated board members with any suggestions that you have or to volunteer your time and energy in support of the many activities we undertake. I look forward to working with all of you on behalf of the birds and birders of Wisconsin.

Jene Lite



Great Horned Owl with prey item by Tom Sykes

## Wintering Location of a Wisconsin Cooper's Hawk and the Impact of Digital Photography on Wildlife Research

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#### ABSTRACT

An adult male Cooper's Hawk that we color-marked on 12 July 2006 as a breeder in Milwaukee, Wisconsin, was reported in a suburban residential neighborhood in the Waco-McGregor area, Texas, on multiple occasions from 2 December 2007 to 18 February 2008; digital photographs identifying this bird were taken on 2 December 2007 and again on 25 January 2008. The wintering location for this Cooper's Hawk was 1524 km southwest (216°) of his breeding location. This report is the first documentation of a relatively long distance migration to a wintering site by a live adult Cooper's Hawk that was breeding in the metropolitan Milwaukee study

area. Digital photography is becoming common among birders and, as its use increases, the benefits to researchers will likely continue to increase as these photos help identify marked individuals.

#### INTRODUCTION

Cooper's Hawks (Accipiter cooperii) nesting in urban locations have become common across North America (e.g., Rosenfield et al. 1996, Boal and Mannan 1999, DeCandido 2005, Stout et al. 2007). Stout et al. (2006a, 2007) studied reproductive success, age structure, nest site reoccupancy, and natal dispersal of an urban Cooper's Hawk population in the metropolitan



Figure 1. Adult male Cooper's Hawk in a suburban yard in the Waco-McGregor area, Texas. This male was banded with a USGS lock-on aluminum leg band on the right leg and a yellow-anodized aluminum leg band on the left leg (marked with white 'R-R-R' letters). The band inset enlargement was digitally enhanced (i.e., contrast increased and brightness decreased). Digital photo by Natalie Kutach (McGregor, TX).

Milwaukee area from 1993-2006. However, we know little about the wintering locations for individuals within this urban population or for Cooper's Hawks elsewhere in North America (Rosenfield and Bielefeldt 1993a). Because prey populations and other ecological factors that affect habitat quality may vary greatly among the wide variety of urban habitats within individual cities and at different geographical locations, information regarding wintering habitat will improve our understanding of urban breeding Cooper's Hawks. Based on an image from a digital camera, we document here the first relatively long distance migration of a live adult Cooper's Hawk that was breeding in the metropolitan Milwaukee area and report on the habitats of the breeding and wintering locations.

#### METHODS

The metropolitan Milwaukee study area (43° N, 88° W) encompassed approximately 1,000 km² in Milwaukee County and adjoining parts of Waukesha, Washington, Dodge, and Ozaukee Counties. Milwaukee and Ozaukee Counties are bordered by Lake Michigan to the east. Landscape composition ranged from high intensity urban land-use in Milwaukee, Wisconsin's largest city with a human

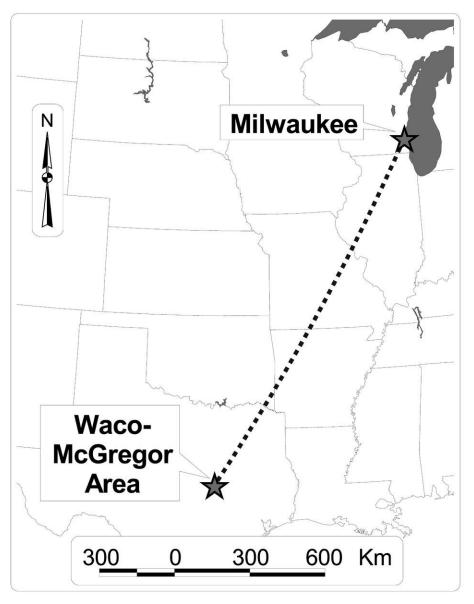


Figure 2. Breeding and wintering locations for an adult male Cooper's Hawk. The breeding location of this male was in an urban landscape in Milwaukee, Wisconsin, and its wintering location was in a suburban residential neighborhood in the Waco-McGregor area, Texas, approximately 1524 km southwest (216°) of its breeding location (the migration route was unknown).

population of approximately 600,000 (a human density of approximately 2,400/km<sup>2</sup>; U.S. Census Bureau 2000), to lower intensity land-use in

the surrounding suburban communities (Stout et al. 2006b, c; Stout et al. 2007).

Cooper's Hawk nests found be-

tween 10 April and 30 May (1993-2008) were visited at least twice annually, once during early incubation and again when the young reached an advanced nestling stage (ca. 18 days), to determine reproductive success (Postupalsky 1974, Stout et al. 2007). We used eighth primary length to age nestlings (Stout et al. 2007; W. E. Stout, unpublished data), a 34 day incubation period (Rosenfield and Bielefeldt 1993a), and the oldest nestling of each brood (i.e., for successful nests) to calculate clutch initiation dates. As a part of statewide intensive mark-recapture studies, we trapped adult (i.e., breeding) Cooper's Hawks near their nests in mist nets with a live Great Horned Owl as a decoy (Rosenfield and Bielefeldt 1993b) during the nestling and fledgling stages from 1996 through 2008 (Stout et al. 2006a, 2007). We banded captured adult Cooper's Hawks with U.S. Geological Survey (USGS) lock-on aluminum leg bands, as well as colored, alphanumerically coded leg bands. We calculated distance and direction from Global Positioning System (GPS) locations.

#### RESULTS

On 2 December 2007, a color-marked adult male Cooper's Hawk was reported in a residential location between Waco and McGregor, Texas; a digital photograph identified this specific color-marked individual (Fig. 1). This bird was observed in the same suburban residential neighborhood three additional times from 22–28 December 2007; and two additional times, 25 January and 18 February 2008, in the same residential yard as

on 2 December 2007. Additional digital photographs of this Cooper's Hawk were taken on 25 January 2008. We were unable to locate this adult male or any nesting attempt within his breeding territory in Milwaukee, Wisconsin, in 2008. This bird was initially trapped, banded, and color-marked on 12 July 2006 in Milwaukee, Wisconsin, as an after-second-year (ASY) breeder. He successfully raised five young in 2006 with a one-year-old (second-year: SY) female and occupied the same nest site in 2007 with another SY female (a nest was built but eggs were apparently not laid; Stout et al. 2006a; W. E. Stout, unpublished data). The clutch initiation date of the 2006 nesting attempt for this male was 5 May, four days later than the average clutch initiation date for all successful Cooper's Hawk nesting attempts in the metropolitan Milwaukee area in 2006 (average: 1 May, range: 19 April-29 May; excluding second nesting attempts), and the 19th clutch laid out of 25 successful nests. The breeding area of this male was located in a high human density residential area adjacent to a small river corridor (the Honey Creek Parkway) that included some natural habitat in the city of Milwaukee. The wintering area of this male was 1524 km southwest (216°) of his breeding site (Fig. 2). The migration route of this Cooper's Hawk was unknown.

Observations of this Cooper's Hawk from 2 December 2007 to 18 February 2008 were in a residential subdivision between Waco and McGregor that was adjacent to natural habitat along a river corridor (a small tributary of the South Bosque River). Waco was a midsized city (human population ca. 113,700, a human density of approxi-

mately 520/km²) and McGregor was a relatively small city (human population ca. 4,700, a human density of approximately 84/km<sup>2</sup>) approximately 15 km southwest of Waco (U.S. Census Bureau 2000). Land use within these cities included industrial, commercial, residential, and recreational land. Residential land within the city of Waco included high, medium, and suburban human density; and residential land within the city of McGregor included medium, suburban, and low human density. A suburban-level land use gradient connected the urban centers of Waco and McGregor; the rural landscape surrounding the Waco-McGregor area was used primarily for agriculture with some natural river corridors.

#### DISCUSSION

This report is the first documentation of a relatively long distance migration to a wintering site by a live adult Cooper's Hawk that was breeding in the metropolitan Milwaukee study area. Although some Cooper's Hawks that nest throughout Wisconsin remain within or near their breeding range during winter, others migrate to southern parts of central and eastern U.S., or to Mexico and Central America for the winter; thus, this population is partially migratory (R. N. Rosenfield and W. E. Stout, unpublished data; Rosenfield and Bielefeldt 1993a, 2006). For Cooper's Hawks, individuals that migrate long distances may nest later than yearround residents (Rosenfield et al. 2007). Clutch initiation for the 2006 nesting attempt of the long-distance migrant in this study was later than

75% of all successful first-clutch nesting attempts in 2006. Nevertheless, we were unable to locate the adult male on his breeding territory in 2008.

In some raptor species, including Cooper's Hawks, individuals tend to select nesting habitat similar to that in which they were raised (Tordoff et al. 1998, Rosenfield et al. 2000, Kenward 2006). Although little is known about the habitat of wintering locations for migrant Cooper's Hawks (Rosenfield and Bielefeldt 1993a; but see Roth et al. 2005), for this study, the breeding location in Milwaukee and the wintering location in the Waco-McGregor area were both in residential neighborhoods adjacent to river corridors. It is possible that the use of specific breeding habitat could also influence the selection of wintering locations and habitats for migrating Cooper's Hawks.

During the past 29 years, more than 750 breeding adult and 2860 nestling Cooper's Hawks have been banded at nest sites throughout Wisconsin (W. E. Stout, R. N. Rosenfield, and J. Bielefeldt, unpublished data; Rosenfield and Bielefeldt 1999, Rosenfield et al. 2007, Stout et al. 2007). Outside of the breeding season gust-February; i.e., breeding season = March–July), only about 70 (ca. 2%) recovery reports for these Cooper's Hawks were found away from their nest sites, and only 20 of these were recovered outside of Wisconsin. The vast majority (>98%) of all our recoveries (both in and out-of-state) were of dead birds, which often provide little reliable information on habitat. Digital camera technology now provides an additional method to increase the pool of recoveries through photos of live birds and, as a result, provides po-

tentially valuable information on the habitat use of live birds. Indeed, the resolution available in computer-enhanced enlargements permitted the reading of the unique alphanumeric code on the color band of the Texas bird reprinted here and of other birds across North America (e.g., Victoria, BC, Canada; see cover photo and caption). Thus, with digital photography being common and digital cameras convenient and easy to use, the benefits to researchers will likely increase as these photos help identify marked individuals. Consequently, we encourage researchers to mark birds with color and/or alphanumeric codes; and we encourage birders and the general public to freely use digital photography with wildlife and to report cases of marked individuals.

#### ACKNOWLEDGMENTS

We greatly appreciate the efforts of Natalie Kutach and Laurie Goodrich (Hawk Mountain Sanctuary) who provided us with this information; Natalie Kutach reported the adult male Cooper's Hawk in her yard in the Waco-McGregor area, Texas, photographed this bird with a digital camera (and granted us permission to use her digital photograph, see Fig. 1), and monitored his presence across this wintering season. Andy Stewart provided information regarding digital photography and his Cooper's Hawk study in Victoria, British Columbia, Canada; and Ron Hoppe (Victogranted ria. BC. Canada) permission to use his digital photograph (see cover photo and caption). Bill Holton provided field assistance for the Milwaukee Cooper's Hawk

study. The Wisconsin Society for Ornithology (WSO) provided partial funding for this research annually through its Small Grants Program (i.e., WSO Scholarship and Steenbock Award). The Personnel Development Committee and the Letters and Science Enhancement Fund at UW-Stevens Point provided partial funding for fieldwork.

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- Robert N. Rosenfield is Professor of Biology at UW-Stevens Point and has pursued research on the behavioral and population ecology of Cooper's Hawks as well as other raptors and songbirds across North America and Greenland for more than 25 years.
- John Bielefeldt is a semi-retired naturalist who has collaborated on Cooper's Hawk research in Wisconsin since 1981. His current work focuses on the numbers of stopover migrants as well as grassland and other breeding birds in the Kettle Moraine State Forest.



American Kestrel by Tom Sykes

### Early Breeding Records and Nesting Phenology of Great Horned Owls in Wisconsin

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#### ABSTRACT

I documented two relatively early successful Great Horned Owl nesting attempts for the 2008 breeding season; one of these is the earliest documented nesting attempt in a breeding season for the state of Wisconsin with a clutch initiation date of 29 December 2007. Both nesting attempts were in the Oak Creek Township of Milwaukee County and were in enclosed microclimates. The protected, relatively warm nest microclimates of these two sites may have encouraged these adults to lay eggs early. The average clutch initiation date for the earliest nest site from 2003–2008, which was successful every year, was 7 January, one month (31 days) earlier than the average clutch initiation date for other Great Horned Owl nesting attempts for this study from 2002–2005. Nevertheless, as populations increase, Great Horned Owls may adapt to new environs or become more tolerant of the extremes of their breeding limits, including temperature.

#### Introduction

Great Horned Owls (Bubo virginianus) are common in Wisconsin and nest throughout the state (Robbins 1991, Petersen 2006); and an increasing population trend was reported for this species, 1983–1997, in the state of Wisconsin (Wisconsin Checklist Project; Temple et al. 1997). I present hatching and laying (i.e., clutch initiation) dates for successful Great Horned Owl nesting attempts from 2002–2005, document two relatively early successful nesting attempts for the 2008 breeding season, and discuss the nesting phenology of Great Horned Owls in Wisconsin.

#### **METHODS**

Great Horned Owl nests were located early in the nesting season and were visited at least twice (once at an early stage of incubation and again when the young reached an advanced nestling stage) annually to determine reproductive success (Postupalsky 1974, Steenhof and Newton 2007). Great Horned Owl nesting surveys were conducted in conjunction with intensive annual nesting surveys for Red-tailed Hawks (*Buteo jamaicensis*) from 2002–2008 (Stout et al. 1996,

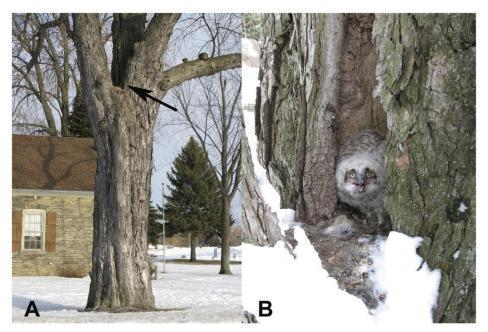


Figure 1. The Great Horned Owl cemetery nest was located in a cavity of the main crotch of a silver maple; a large tree limb shielded the cavity opening (A). A 29-day-old nestling was banded on 29 February 2008 (B). Photos by William E. Stout.



Figure 2. The Great Horned Owl power plant nest was in a Peregrine Falcon nest box at the *We Energies* Oak Creek Power Plant. The interior of the box was relatively shielded from windy conditions. Two nestlings (22 and 25 days old) were banded on 6 March 2008. Photo by William E. Stout.



Figure 3. In 2004 and 2005, the Great Horned Owl power plant nest was located in an elevator house, a small enclosure or "house" on the elevated end of a coal conveyor belt/elevator. The elevator house was open below allowing access by the adult Great Horned Owls and exposing the nest microclimate to relatively windy conditions; the nest was on a walkway floor inside the elevator house. Photo by Greg Septon.



Figure 4. An adult Great Horned Owl was present in the nest box during daylight hours until 31 March 2008 but was not present thereafter. The two nestlings fledged on 5 and 6 April, presumably at 55 and 53 days old (oldest and youngest, respectively). These young may have fledged older than average fledging-age Great Horned Owls because of ample space in the nest box (and perhaps the ledge on the box; however, the young regularly perched on this ledge during at least the last week of the nestling period) as well as a substantial drop (ca. 36 m) to ground level. Photo courtesy of We Energies.

1998; Stout et al. 2006a, b). A nest was considered successful if at least one young reached an advanced nestling stage (Steenhof and Newton 2007). Nestlings were banded with U.S. Geological Survey (USGS) lock-on aluminum leg bands. Fourth primary length was used to age nestlings (Petersen and Thompson 1977). Backdating provided an estimate for hatching and laying dates. A 33-day incubation period was used to calculate laying dates (Houston et al. 1998). Great Horned Owl hatching and laying dates for successful nesting attempts during 2002-2005 were used for comparison purposes because reasonable sample sizes were obtained. Only the oldest nestling of each brood was used to determine hatching and laying (i.e., clutch initiation) dates. For comparison purposes, all years of data (2003–2008) for two relatively early nesting attempts were excluded from 2002-2005 annual and combined data (i.e., Table 1).

Two relatively early Great Horned Owl nesting attempts were monitored in 2008. One of these nesting attempts was located in a cemetery (hereafter referred to as the cemetery nest) and the other nesting attempt was located Peregrine Falcon (Falcoperegrinus) nest box at the We Energies Oak Creek Power Plant (hereafter referred to as the power plant nest). Nestlings were banded, and hatching and laying dates were determined. Field observations or still-frame video footage were compared to hatching and laying date estimates, and were used to confirm fledging of young (i.e., nesting success) for these two nesting attempts. The nestlings at the power plant nest were banded under the cover of darkness in 2008 to minimize negative interactions of the adult Great Horned Owls and a resident pair of Peregrine Falcons; all other Great Horned Owl nestlings were banded during daylight hours. I considered the last day of which a nestling was present in the nest as the fledging date (i.e., present one day [the fledging date], not present the next).

#### RESULTS

For 2002–2005, 19–24 successful Great Horned Owl nests were found annually (excluding the cemetery and power plant nests; Table 1). The average hatching date across all years was 12 March (earliest date: 13 February, latest date: 7 April), and the average laying date was 7 February (earliest date: 11 January, latest date: 5 March; Table 1).

Two relatively early Great Horned Owl nests were located in the Oak Creek Township of Milwaukee County, southeast Wisconsin, in 2008. One nest (the cemetery nest) was in a silver maple (Acer saccharinum) tree along the side of a road that bordered a cemetery in South Milwaukee (Fig. 1-A). This nest was located in a cavity in the main crotch of the tree approximately 6.5 m above ground level (Fig. 1-B); a large tree limb shielded the cavity opening (Fig. 1-A). South Milwaukee had a human population of approximately 21,256 (a human density of about 1720/km<sup>2</sup>; U.S. Census Bureau 2000); the city consisted primarily of residential areas with high and medium level human density, and also included some industrial, commercial, and recreational land. The cemetery was in an urban landscape that was completely surrounded by

Table 1. Hatching and laying dates for successful Great Horned Owl nests from 2002–2005. Only the oldest nestling of each nesting attempt was used to determine hatching and laying (i.e., clutch initiation) dates. For comparison purposes, the cemetery and power plant nests were excluded from these data.

		Hatching Dates			Laying Dates			
Year	n	Average	Earliest	Latest	Average	Earliest	Latest	
2002	19	14 Mar 02	13 Feb 02	02 Apr 02	09 Feb 02	11 Jan 02	28 Feb 02	
2003	24	14 Mar 03	18 Feb 03	07 Apr 03	09 Feb 03	16 Jan 03	05 Mar 03	
2004	22	11 Mar 04	20 Feb 04	31 Mar 04	07  Feb  04	18 Jan 04	27 Feb 04	
2005	19	08 Mar 05	24  Feb  05	27 Mar 05	03 Feb 05	22 Jan 05	22 Feb 05	
All years	84	12 Mar	13 Feb	07 Apr	07 Feb	11 Jan	05 Mar	

high and medium density residential subdivisions. The second nest (the power plant nest in the Peregrine Falcon nest box) was located on an upper elevation level of the decommissioned north building of the power plant approximately 36 m above ground level with an east-northeast exposure (ca. 68°) overlooking Lake Michigan (the lake was about 300 m perpendicular [east-northeast] from the nest box and 100 m diagonally to the southeast); the interior of the box was relatively shielded from windy conditions (Fig. 2). This nesting location was bordered by industrial land to the west and Lake Michigan to the east. The greater area included agricultural, residential, recreational, and industrial land and natural habitat (wooded land and grasslands).

The Great Horned Owl nest located in the cemetery was successful every year from 2003–2008 (Table 2). On 22 December 2007, two adult Great Horned Owls were observed copulating two different times in the cemetery during daylight hours. An adult owl was first noticed in an incubating posture in the nest cavity on 1 January 2008 and regularly thereafter throughout January (no observations were made prior to 1 January). One nestling was banded on 29 February

2008; based on 4<sup>th</sup> primary length, the nestling was 29 days old. Thus, the egg likely hatched on 31 January 2008, and based on a 33-day incubation period, the egg was laid on 29 December 2007. Air temperature at the time of banding (ca. 13:30 CST) was approximately 3.3°C, and was about 5.0°C later in the afternoon (air temperature reached ca. –12°C during two of the previous five nights; NOAA 2008).

Table 2. Hatching and laying dates for all Great Horned Owl nestlings at the cemetery and power plant nests, 2003–2008. The average hatching and laying dates, 2003–2008, for the oldest nestlings only (i.e., first egg laid; clutch initiation date) for the cemetery nest was 9 February and 7 January, respectively (power plant nest: 13 March and 8 February, respectively).

Year	Nestling	Hatching Date	Laying Date
	(	Cemetery Nest	
2003	1	15 Feb 03	13 Jan 03
2004	1	17 Feb 04	15 Jan 04
2005	1	09 Feb 05	07 Jan 05
2005	2	11 Feb 05	09 Jan 05
2005	3	16 Feb 05	14 Jan 05
2006	1	06 Feb 06	04 Jan 06
2006	2	10 Feb 06	08 Jan 06
2007	1	10  Feb  07	08 Jan 07
2007	2	11 Feb 07	09 Jan 07
2008	1	31 Jan 08	29 Dec 07
	Pe	ower Plant Nest	
2004	1	05 Apr 04	03 Mar 04
2005	1	23 Mar 05	18 Feb 05
2008	1	10 Feb 08	08 Jan 08
2008	2	13 Feb 08	11 Jan 08

The nestling subsequently fledged from this nest on 15 March 2008 (present on 15 March, not present on 16 March) at 44 days old and was seen perched nearby on 19 March. The average hatching and laying dates, 2003–2008, for the oldest nestling only (i.e., first egg laid) for the cemetery nest was 9 February and 7 January, respectively (Table 2).

The Great Horned Owl nest located at the Oak Creek Power Plant was found in 2004, 2005, and 2008; and was successful in each of those years (Table 2). In 2004 and 2005, the nest was located in an elevator house (a small enclosure or "house" on the elevated end of a coal conveyor belt/elevator) approximately 25 m above ground level; the elevator house was open below allowing access by the adult Great Horned Owls and exposing the nest microclimate to relatively windy conditions (W. E. Stout, personal observation; Fig. 3). On 8 January 2008 a Great Horned Owl egg was observed in the Peregrine Falcon nest box and an adult owl was observed incubating throughout January 2008. Two nestlings were banded on 6 March (Fig. 2). Outside air temperature at the time of banding (ca. 21:15 CST) was approximately -5.1°C; air temperature in the nest box was approximately 14.8°C. Based on 4th primary length, the nestlings were 22 and 25 days old at the time of banding. Thus, these eggs likely hatched on 10 and 13 February and were laid on 8 and 11 January. An adult owl was present in the nest box during daylight hours until 31 March (Fig. 4) and was not present thereafter. The adults may have withheld food during this time period (i.e., during their noted absence) to encourage the

young to leave the nest. The young fledged from this nest on 5 and 6 April, presumably (i.e., if the oldest fledged first) at 55 and 53 days old (oldest and youngest, respectively). These young may have fledged older average fledging-age Great Horned Owls because of ample space in the nest box (and perhaps a ledge on the box [Figs. 2 and 4]; however, the young regularly perched on this ledge during at least the last week of the nestling period) as well as a substantial drop (ca. 36 m) to ground level. The average hatching and laying dates for the oldest nestlings only (2004, 2005, and 2008) for the power plant nest was 13 March and 8 February, respectively (Table 2).

#### DISCUSSION

Two relatively early Great Horned Owl nesting attempts were successful for the 2008 breeding season. Both nesting attempts were in the Oak Creek Township of Milwaukee County, southeast Wisconsin, and were in enclosed microclimates. The cemetery nesting attempt is the earliest documented Great Horned Owl nesting attempt in a breeding season for the state of Wisconsin with a clutch initiation date of 29 December 2007. Hatching and laying date estimates were consistent with field observations and still-frame video footage for these two nesting attempts, suggesting that these estimates are valid. Furthermore, temperatures were below average and the amount of snowfall was above average for January and February 2008 (NOAA 2008). Because of these weather conditions, it is not likely that the incubation period for these eggs was less than the

average of 33 days (although the range is 30-37 days [Houston et al. 1998, Petersen 2006]); and thus, the calculated hatching and laying dates are probably accurate. Petersen (1979) studied a Great Horned Owl population in southern Wisconsin, the same latitude and general geographic location as my study (although his study was rural, whereas, my study was urban), from 1972-1975; and the earliest clutch initiation date for his study was 29 January (in 1973). However, Robbins (1991) reported the earliest clutch initiation date of 20 January from an extensive list of records (published and unpublished) up to and including 1989. The laying date of 29 December for the cemetery nest is 22 days earlier than the date reported by Robbins (1991). Although the egg of this nesting attempt was the earliest documented live egg for 2008, it probably represents the last egg laid in 2007 rather than the first laid in 2008 (thus, this female actually laid two different, successful clutches in 2007). Consequently, the power plant nest may have contained the earliest documented egg(s) laid in 2008 (however, the cemetery nest was earlier [i.e., had eggs] in other years than the power plant nest in 2008).

The protected, relatively warm microclimates of the cemetery and power plant nests may have encouraged these adult Great Horned Owls to lay eggs early. Although Great Horned Owls commonly use Red-tailed Hawk nests, some nesting attempts are made in tree cavities (Errington 1932, Houston et al. 1998; W. E. Stout, unpublished data). However, in pre-settlement and early settlement times before widespread logging in Wisconsin removed the larger trees with suitable nest cavities, Great Horned Owls may have pre-

ferred these locations for nesting (Bendire 1892, Petersen 2006). The average clutch initiation date for the cemetery nest site from 2003-2008, which was successful every year, was 7 January, one month (31 days) earlier than the average clutch initiation date for other Great Horned Owl nesting attempts for this study from 2002–2005. Both relatively early nesting attempts were located in enclosed environments that were shielded from high winds, and the temperatures of the nest microclimates may have been higher than typical open nesting attempts such as those located on top of Red-tailed Hawk nest structures. In pre-settlement times, if Great Horned Owls nested in tree cavities more frequently, they may have nested earlier than records indicate.

Furthermore, the nesting phenology of Great Horned Owls in southern Wisconsin appeared to follow an earlier annual time frame for my study compared to the 1970s. Petersen (1979) found mean clutch initiations dates of 23 February, 8 February, 15 February, and 16 February for 1972–1975, respectively (annual sample size was 10, 10, 8, and 7, respectively). The average clutch initiation date of 7 February for the 2002-2005 nests in my study is earlier than the dates reported by Petersen (1979). Moreover, the latest clutch initiation date for this study (5 March) is also earlier than the latest dates of 21 March (1972) and 8 April reported by Petersen (1979) and Robbins (1991), respectively. Thus, both early and late clutch initiation dates, as well as annual and combined averages of these values, for my study are earlier than previously reported dates (e.g., in the 1970s), suggesting a shift toward earlier egg laying dates by Great Horned Owls in southern Wisconsin. Nevertheless, as populations increase (Temple et al. 1997), Great Horned Owls may adapt to new environs or become more tolerant of the extremes of their breeding limits, including temperature.

#### ACKNOWLEDGMENTS

I greatly appreciate the field assistance of Gene Johansen; he monitored the South Milwaukee Great Horned Owls annually. Bill Holton, Greg Septon, Noel Cutright, and *We Energies* provided access to the Peregrine Falcon nest box to band the Great Horned Owl nestlings. Bill Holton provided field assistance throughout this study. Sergej Postupalsky and Bob Rosenfield provided comments that improved this manuscript.

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## 40 Years of Bird Migration Records for the Baraboo Hills, Wisconsin: Preliminary Analysis

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#### ABSTRACT

A preliminary analysis of 40 years of bird migration records for the Baraboo Hills in south central Wisconsin is reported herein. The period 1986–2005 is covered for comparison with the period 1966–1985, which was covered in an earlier paper in this journal. Comparison of spring median arrival dates for a total of 82 summer residents and transients for the period 1966–1979 with the period 1980–2005 revealed that 71 of the species had earlier arrival dates in the latter period. Of these 71 species, a total of 13 short-distance migrants and 7 longdistance migrants had earlier arrival dates of at least 5 days; these earlier arrival dates are statistically significant for most of these 20 species. Long-distance migrants should arrive in Wisconsin at about the same time each year, whereas the arrival of short-distance migrants should be more variable. The earlier arrivals of the long-distance migrants may be due to an acceleration of their journey once they leave their wintering ground in response to warming conditions along the way.

#### INTRODUCTION

Bird migration is one of Nature's grand spectacles. One hears it by night as chips sound overhead, and sees it by day as new arrivals appear, as if by magic. "How do you place a value on inspiration," Terry Tempest Williams asked, "How do you quantify the wildness of birds, when for the most part, they lead secret and anonymous lives?" Herein I attempt to summarize a total of 40 years of bird migration records for one area in south central Wisconsin, the Baraboo Hills.

The study area is well known to geologists and biologists, and has been a locality for research and recreation for over a century and a half (Lange 1989). The Baraboo Range, usually called the Baraboo Hills or Baraboo Bluffs, is a major landform in Sauk and Columbia Counties, attaining a maximum elevation of 1,593 feet at Point Sauk near Baraboo. Now recognized as one of The Nature Conservancy's Last Great Places, it consists of

an elliptical ring of quartzite rock which extends for some 25 miles between Rock Springs in the west and Cascade Mountain in the east; the enclosed valley, called the Baraboo Valhas a north-south distance averaging approximately 5 miles. Often described as a forested island in a sea of woodlots and farmland, the Range is the largest relatively unfragmented forested landscape in this part of Wisconsin. Within these ancient hills are such well known places as Devil's Lake State Park, Parfrey's Glen, Durward's Glen, Baxter's Hollow and Klondike, Natural Bridge State Park, Pine Hollow near Denzer and Hemlock Draw near Leland, and the Wisconsin Society for Ornithology's Honey Creek property. Most records for this study were from Devil's Lake State Park; other places in the Range were covered only secondarily. Mossman and Lange (1982) reviewed the geography, geology, and vegetation of the study area.

#### **METHODS**

In a paper in this journal (Lange 1986), I reported arrival and departure dates for summer resident birds and transient birds in the Baraboo Hills the year 20 1966–1985. An additional 20 years of migration records, including records from other observers (see Acknowledgments), have been compiled for the Baraboo Hills since the publication of that paper; this period (1986-2005) is covered herein. All these records are based upon daily coverage in the spring and less than daily but still regular coverage in the fall. Only those species found for at

least 4 years are included in this compilation.

Because of the general recognition that a warming climate was occurring by at least 1980 (see, for example Pearce 2007), I have also chosen to compare spring median arrival dates for summer residents and transients for the period 1966–1979 (14 years) with the period 1980–2005 (26 years), rather than for the two 20 year periods 1966–1985 and 1986–2005 (there was only limited coverage for the 3 year period 1996–1998).

Tables 1–4 detail the migration records for the period 1986–2005. Notice that in Tables 1 and 2 the species are arranged chronologically, whereas in Tables 3 and 4 they are arranged systematically. Table 5 compares the spring median arrival dates of 82 species for the periods 1966–1979 and 1980–2005.

A total of 20 species had arrival dates earlier by at least 5 days for the period 1980-2005 compared to the period 1966-1979. The arrival dates for these species were converted to Julian dates for statistical analysis with the Mann-Whitney U test. In addition, Spearman rank correlation was used to test for overall change in arrival dates for these 20 species over the entire 40 year period 1966-2005. Both tests are conservative because they make no assumptions about the distribution of dates. All analysis was performed with ABstat 7.20 software (1994, Anderson-Bell Corp., Parker, Colorado). Significance in all tests was set at P<.05 for 2-tailed tests.

We know that certain species have declined in numbers in recent years. A prime example is the Cerulean Warbler: the numbers of this species since the 1960s have plummeted an esti-

Table 1. Arrivals of summer residents, Baraboo Hills, 1986–2005.

Sandhill Crane         10         9 : Eastern Bluebird         12         9 : Common Grackle         15         9 : Common Grackle         10         15         9 : Common Grackle         10         1	Date	Range
Sandhill Crane         10         9 : Eastern Bluebird         12         9 : Common Grackle         15         9 : Common Grackle         10         <	ch	
Eastern Bluebird	25 Feb.–15 Mar.	•
Common Grackle         15         9         5         Killdeer         12         10         11         Inchey Vulture         15         11         Inchey Vulture         12         Inchey Vulture         11         Inchey Vulture         12         Inchey Vulture         11         Inchey Vulture         12         Inchey Vulture         12         Inchey Vulture         13         3         3         3         24         Eastern Probe         15         26         Brown Probe         15         26         Brown Probe         15         30         15         26         16         11         17         13         30         17         13         30         17         13         30         17         13         30         17         13         18         18         18         18         18         18         18         18         18 <td>27 Feb23 Mar.</td> <td></td>	27 Feb23 Mar.	
Killdeer         12         10:7           Turkey Vulture         15         11           Red-winged Blackbird         14         11:1           Eastern Meadowlark         13         13           American Woodcock         18         18           Wood Duck         13         24           Eastern Phoebe         15         25           Brown-headed Cowbird         15         26           Winter Wren         15         30           Tree Swallow         13         31           Tree Swallow         13         31           Field Sparrow         16         11:           Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21	29 Feb27 Mar.	
Turkey Vulture Red-winged Blackbird Red-winged Blackbird American Woodcock 18 American Woodcock 18 Wood Duck 13 Eastern Phoebe 15 Eastern Phoebe 15 Brown-headed Cowbird 15 Worther Wren 15 Tree Swallow 13 Tree Swallow 13 Tree Swallow 14 Apri Chipping Sparrow 15 Chipping Sparrow 16 Chipping Sparrow 17 Tousiana Waterthrush 17 Lousiana Waterthrush 17 Broad-winged Hawk 17 Brown Thrasher 17 Brown Thrasher 17 Bueswanp Sparrow 15 Bue-gray Gnatcatcher 16 Blue-gray Gnatcatcher 17 Black-and-white Warbler 17 Baltimore Oriole 17 Black-and-white Warbler 17 Black-throated Green Warbler 17 Black-throated Green Warbler 17 Black-throated Green Warbler 17 Black-throated Green Warbler 17 Buest Flycatcher 16 Covenbird 17 Common Yellowthroat 17 American Redstart 17 Blue-gray Guarted Hummingbird 16 Great Crested Flycatcher 17 Bube-winged Warbler 17 Bube-winged Warbler 17 Bube-winged Green 18 Buboolink 15 Buboolink 15 Bube-winged Green 17 Bube-winged Green 17 Bube-winged Green 18 Bube-winged Green 19 Bube	26 Feb17 Mar.	
Red-winged Blackbird         14         11.1           Eastern Meadowlark         13         13           American Woodcock         18         18           Wood Duck         13         24           Eastern Phoebe         15         25           Brown-headed Cowbird         15         26           Winter Wren         15         30           Tree Swallow         13         31           Field Sparrow         16         11*           Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Louisiana Waterthrush         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         26           Spotted Sandpiper         17         28	22 Feb27 Mar.	
Eastern Meadowlark American Woodcock American Wedsurbler Black-underd Marbler Black-underd Warbler Black-underd Hummingbird American Warbler Black-underd Warbler Black-underd Hummingbird American Wood Trush Chipping Sparrow American Woodcock American Redstart American Redstart American Redstart American Redstart American Warbler American Warbler American Warbler American Redstart American Redstart American Redstart American Redstart American Redstart American Redstart American Warbler Ame	6 Feb.–22 Mar.	
American Woodcock  Wood Duck  Eastern Phoebe Eastern Phoebe Brown-headed Cowbird  Winter Wren  Tree Swallow  Tree	25 Feb15 Mar.	
Wood Duck         13         24           Eastern Phoebe         15         25           Brown-headed Cowbird         15         26           Winter Wren         15         30           Tree Swallow         13         31           Field Sparrow         16         11           Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         26           Spotted Sandpiper         17         26           Spotted Sandpiper         17         29           Green Heron         16         30           Nashville Warbler         16         30      <	5 Mar.–31 Mar.	
Eastern Phoebe Brown-headed Cowbird Winter Wren 15 Brown-headed Cowbird 15 Brown 16 Brown 17 Brown 17 Brown 18 Brown Bro	4 Mar.–28 Mar.	
Brown-headed Cowbird         15         26           Winter Wren         15         30           Tree Swallow         13         31           Field Sparrow         16         111           Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Black-and-white Warbler         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17	7 Mar.–6 Apr	
Winter Wren       15       30         Free Swallow       13       31         Field Sparrow       16       111         Chipping Sparrow       17       13         No. Rough-winged Swallow       17       15         Louisiana Waterthrush       17       15         Eastern Towhee       17       17         Broad-winged Hawk       17       18         Broad-winged Hawk       17       18         Brown Thrasher       17       19         Swamp Sparrow       15       20         Barn Swallow       16       21         House Wren       16       25         Blue-gray Gnatcatcher       17       25         Blue-gray Gnatcatcher       17       25         Blue-gray Gnatcatcher       17       26         Spotted Sandpiper       17       28         Baltimore Oriole       17       29         Green Heron       16       30         Nashville Warbler       16       30         Nashville Warbler       17       30         Black-throated Green Warbler       17       30         Keast-Flycatcher       16       2         Ove	12 Mar.–6 Apr.	
Tree Swallow	12 Mar10 Apr.	•
Tree Swallow	15 Mar15 Apr.	
April	17 Mar.–11 Apr.	
Field Sparrow         16         11           Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Blue-dwhite Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2     <		
Chipping Sparrow         17         13           No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17 <t< td=""><td>27 Mar20 Apr.</td><td>•</td></t<>	27 Mar20 Apr.	•
No. Rough-winged Swallow         17         15           Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Rose-breasted Grosbeak         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         5     <	17 Mar.–22 Apr.	
Louisiana Waterthrush         17         15           Eastern Towhee         17         17           Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Warbling Vireo         15         3           Gray Catbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         4           Yellow-throated Vireo         17         5	9 Apr.–22 Apr.	
Eastern Towhee       17       17         Broad-winged Hawk       17       18         Brown Thrasher       17       19         Swamp Sparrow       15       20         Barn Swallow       16       21         House Wren       16       25         Blue-gray Gnatcatcher       17       25         Blue-gray Gnatcatcher       17       25         Black-and-white Warbler       17       26         Spotted Sandpiper       17       28         Baltimore Oriole       17       29         Green Heron       16       30         Nashville Warbler       16       30         Vallow Warbler       17       30         Black-throated Green Warbler       17       30         Rose-breasted Grosbeak       17       30         Warylling Vireo       15       3         Gray Catbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       5         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolin	31 Mar22 Apr.	
Broad-winged Hawk         17         18           Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         28           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Rose-breasted Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Warbling Vireo Grosbeak         17         2           Warbling Vireo         15         3           Gray Cathird         17         3           Cownbird         17         3           Warbling Vireo         15         3           Gray Cathird         17         5           Blue-winged Warbler         14         5	5 Apr.–30 Apr.	
Brown Thrasher         17         19           Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Rose-breasted Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Warbling Vireo Green Warbler         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         5           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6	27 Mar.–24 Apr.	
Swamp Sparrow         15         20           Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         5           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6	12 Apr.–30 Apr.	
Barn Swallow         16         21           House Wren         16         25           Blue-gray Gnatcatcher         17         25           Blue-gray Gnatcatcher         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Rose-breasted Grosbeak         17         30           Warbling Vireo Grosbeak         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         5           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Blobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16<	20 Mar.–5 May	
House Wren   16   25     Blue-gray Gnatcatcher   17   25     Black-and-white Warbler   17   26     Spotted Sandpiper   17   28     Baltimore Oriole   17   29     Green Heron   16   30     Nashville Warbler   16   30     Warblile Warbler   17   30     Black-throated Green Warbler   17   30     Rose-breasted Grosbeak   17   30     May Least Flycatcher   16   2     Ovenbird   17   2     Warbling Vireo   15   3     Gray Catbird   17   3     Common Yellowthroat   17   4     Wellow-throated Vireo   17   5     Blue-winged Warbler   14   5     Bobolink   15   5     Ruby-throated Hummingbird   16   6     Great Crested Flycatcher   16   6     Eastern Kingbird   17   7     American Redstart   16   7     Wood Thrush   17   8     Chestnut-sided Warbler   16   8     Blackburnian Warbler   16   8     Blackburnian Warbler   16   8     Cerulean Warbler   16     Cerul	12 Apr30 Apr.	
Blue-gray Gnatcatcher         17         25           Black-and-white Warbler         17         26           Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         4           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         <		
Black-and-white Warbler       17       26         Spotted Sandpiper       17       28         Baltimore Oriole       17       29         Green Heron       16       30         Nashville Warbler       16       30         Yellow Warbler       17       30         Black-throated Green Warbler       17       30         Rose-breasted Grosbeak       17       30         Least Flycatcher       16       2         Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Bl	18 Apr.–29 Apr.	
Spotted Sandpiper         17         28           Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         4           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         7           Wood Thrush         17         8           Chestnut-sided Warbler         16         8		
Baltimore Oriole         17         29           Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         4           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         7           Wood Thrush         17         8           Chestnut-sided Warbler         16         8           Blackburnian Warbler         16         8	1 /	
Green Heron         16         30           Nashville Warbler         16         30           Yellow Warbler         17         30           Black-throated Green Warbler         17         30           Rose-breasted Grosbeak         17         30           Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         4           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         7           Wood Thrush         17         8           Chestnut-sided Warbler         16         8           Blackburnian Warbler         16         8	23 Apr10 May	
Nashville Warbler       16       30         Yellow Warbler       17       30         Black-throated Green Warbler       17       30         Rose-breasted Grosbeak       17       30         Least Flycatcher       16       2         Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       5         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Blobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Berulean Warbler       14       8	24 Apr.–12 May	
Yellow Warbler       17       30         Black-throated Green Warbler       17       30         Rose-breasted Grosbeak       17       30         Least Flycatcher       16       2         Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	22 Apr.–11 May	
Black-throated Green Warbler       17       30         Rose-breasted Grosbeak       17       30         Least Flycatcher       16       2         Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Berulean Warbler       14       8	25 Apr.–6 May	
Rose-breasted Grosbeak       17       30         May       May         Least Flycatcher       16       2         Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	24 Apr.–14 May	
May		
Least Flycatcher         16         2           Ovenbird         17         2           Warbling Vireo         15         3           Gray Catbird         17         3           Common Yellowthroat         17         4           Yellow-throated Vireo         17         5           Blue-winged Warbler         14         5           Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         7           Wood Thrush         17         8           Chestnut-sided Warbler         16         8           Blackburnian Warbler         16         8           Cerulean Warbler         14         8	1 /	
Ovenbird       17       2         Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	<sup>'</sup> 24 Apr.–11 May	7
Warbling Vireo       15       3         Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	25 Apr.–8 May	
Gray Catbird       17       3         Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	19 Apr.–11 May	
Common Yellowthroat       17       4         Yellow-throated Vireo       17       5         Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	10 Apr.–7 May	
Yellow-throated Vireo     17     5       Blue-winged Warbler     14     5       Bobolink     15     5       Ruby-throated Hummingbird     16     6       Great Crested Flycatcher     16     6       Eastern Kingbird     17     7       American Redstart     16     7       Scarlet Tanager     16     7       Wood Thrush     17     8       Chestnut-sided Warbler     16     8       Blackburnian Warbler     16     8       Cerulean Warbler     14     8	25 Apr.–11 May	
Blue-winged Warbler       14       5         Bobolink       15       5         Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	16 Apr.– 8 May	
Bobolink         15         5           Ruby-throated Hummingbird         16         6           Great Crested Flycatcher         16         6           Eastern Kingbird         17         7           American Redstart         16         7           Scarlet Tanager         16         7           Wood Thrush         17         8           Chestnut-sided Warbler         16         8           Blackburnian Warbler         16         8           Cerulean Warbler         14         8	30 Apr.–11 May	
Ruby-throated Hummingbird       16       6         Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	28 Apr.–17 May	
Great Crested Flycatcher       16       6         Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	27 Apr.–15 May	
Eastern Kingbird       17       7         American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	17 Apr.–15 May	
American Redstart       16       7         Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	26 Apr.–17 May	
Scarlet Tanager       16       7         Wood Thrush       17       8         Chestnut-sided Warbler       16       8         Blackburnian Warbler       16       8         Cerulean Warbler       14       8	27 Apr.–11 May	
Wood Thrush         17         8           Chestnut-sided Warbler         16         8           Blackburnian Warbler         16         8           Cerulean Warbler         14         8	30 Apr.–11 May	
Chestnut-sided Warbler168Blackburnian Warbler168Cerulean Warbler148	1 May-16 May	
Blackburnian Warbler168Cerulean Warbler148	1 May-10 May	
Cerulean Warbler 14 8	28 Apr.–13 May	
	29 Apr.–25 May	
	28 Apr.–14 May	
Magnolia Warbler169Eastern Wood-Pewee1610	3 May–17 May 4 May–14 May	

(Continued)

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Table 1.	. (Con	tınu	.ea)

Species	No. Years	Median Date	Range
Red-eyed Vireo	17	10 25 Apr.–14 N	<b>M</b> ay
Veery	14	10 1 May-15 N	Лау
Golden-winged Warbler	15	10 1 May-21 M	Ла́у
Canada Warbler	15	10 2 May-19 M	May
Common Nighthawk	13	11 2 May-20 M	May
Mourning Warbler	15	13 7 May-19 M	May
Black-billed Cuckoo	13	14 6 May-28 M	May
Acadian Flycatcher	14	15 9 May-24 M	May
Yellow-billed Cuckoo	11	16 12 May-30 M	May

mated 70%, reportedly the highest population decline of any neotropical migrant. A decline in numbers could account for certain apparent anomalies in this study, for example the seemingly early departure date of 2 September for the Blackburnian Warbler in the period 1986–2005 (18 September in the period 1966–1979). Fewer birds could also result in later arrival dates in spring.

Certain species (for example Sharpshinned and Cooper's Hawks, Mourning Dove, and Song Sparrow) are not included in this study because of the uncertainty of distinguishing migrants from overwintering individuals. Also several summer residents (Red-winged Blackbird, Common Grackle, Brownheaded Cowbird) are not included for fall because their departure dates are often difficult to determine.

I know of only one other comparable study for Wisconsin, a survey of phenological events in the Wisconsin River Valley at the nearby Leopold Reserve (Fairfield Township, Sauk County) for the period 1936–1998; the authors (Bradley, Leopold, Ross, and Huffaker 1999) include a total of 18 spring migrants in their survey, which emphasizes the first blooms of spring wildflowers. Hilsenhoff (1974)

and 2002) reported on spring migration in Wisconsin, but his emphasis was on numbers of birds.

#### RESULTS AND DISCUSSION

Perusal of Table 1 reveals that most summer residents arrive in the last week of April and the first 10 days of May, and perusal of Table 2 reveals that approximately half the summer residents depart in the last half of September.

Perusal of Tables 3 and 4 reveals some interesting patterns among the transients. Common Goldeneye can be found on Devil's Lake for approximately 3 weeks in spring, and over a nearly 7 week period in fall; Common Loon, in contrast, can be found on Devil's Lake for some 6 weeks in spring, but just for 3 weeks in fall. Blue-headed Vireo is generally found for less than a week in a given spring or fall. The two kinglets pass through over a 4-5 week period in spring; in fall the Golden-crowned is found for some two months, and the Rubycrowned for approximately 6 weeks. Of the thrushes, the Gray-cheeked is always the least numerous; in a given year, it is found for a week or so in spring, and just a day or so in fall.

Table 2. Departures of summer residents, Baraboo Hills, 1986–2005.

Species	No. Years	Median Date	Range
	_	August	
Yellow Warbler	5	1312 Aug.–20 Aug.	
Acadian Flycatcher	7	2013 Aug.–5 Sep.	
Canada Warbler	8	2616 Aug.–2 Sep.	
Baltimore Oriole	15	2718 Aug.–5 Sep.	
Bobolink	7	2929 Aug.–26 Sep.	
Eastern Kingbird	19	3116 Aug.–11 Sep.	
		September	
Blue-winged Warbler	13	1 22 Aug.–8 Sep.	
Blackburnian Warbler	7	224 Aug.–17 Sep.	
Indigo Bunting	8	519 Aug.–30 Sep.	
Barn Swallow	15	728 Aug.–17 Sep.	
Blue-gray Gnatcatcher	17	718 Aug.–21 Sep.	
Veery	7	827 Aug.–12 Sep.	
Common Nighthawk	14	11 2 Sep.–17 Sep.	
Great Crested Flycatcher	11	1424 Aug.–27 Sep.	
Ruby-throated Hummingbird	16	15 6 Sep.–3 Oct.	
Louisiana Waterthrush	4	1513 Sep.–30 Sep.	
Wood Thrush	11	16 1 Sep.–1 Oct.	
Golden-winged Warbler	9	1624 Aug.–29 Sep.	
Yellow-throated Vireo	14	17 8 Sep.–8 Oct.	
Warbling Vireo	14	18 12 Sep.–1 Oct.	
Ovenbird	11	1930 Aug.– 8 Oct.	
Eastern Wood-Pewee	16	22 9 Sep.–5 Oct.	
Chestnut-sided Warbler	16	22 2 Sep.–2 Oct.	
Black-and-white Warbler	14	22 9 Sep.–27 Sep.	
Broad-winged Hawk	13	2412 Sep.–3 Nov.	
Spotted Sandpiper	8	24 2 Sep.–19 Oct.	
Scarlet Tanager	14	2423 Aug.–2 Oct.	
Least Flycatcher	8	25 18 Sep.–8 Oct.	
Red-eyed Vireo	16	2613 Sep.–24 Oct.	
Black-throated Green Warbler	12	2618 Sep.–22 Oct.	
Rose-breasted Grosbeak	14	26 5 Sep.– 2 Oct.	
Nashville Warbler	17	2727 Aug.–14 Oct.	
American Redstart	18	2713 Sep.–22 Oct.	
Green Heron	7	2825 Aug.–31 Oct.	
House Wren	14	29 1 Sep.–27 Oct.	
Magnolia Warbler	$\hat{1}\hat{7}$	29 10 Sep.–9 Oct.	
Common Yellowthroat	17	2910 Sep.–11 Oct.	
Brown Thrasher	10	3031 Aug.–8 Dec.	
	~~	October	
Tree Swallow	11	3 18 Sep.–9 Oct.	
Gray Catbird	19	925 Sep.–24 Nov.	
Chipping Sparrow	5	9 4 Oct.–2 Nov.	
Field Sparrow	17	1025 Sep.–12 Nov.	
Killdeer	9	12 27 Sep.–6 Nov.	
Eastern Towhee	18	15 2 Oct.–1 Nov.	
Eastern Meadowlark	5	1627 Sep.– 6 Nov.	
Eastern Phoebe	19	1830 Sep.–21 Dec.	
Swamp Sparrow	16	1825 Sep.–3 Nov.	
American Woodcock	7	29 25 Sep.–5 Nov.	
Wood Duck	10	3112 Sep.–27 Nov.	
WOOd Duck	10	November	
American Robin	16	November 1 23 Oct.–8 Dec.	
Winter Wren	12	5 4 Oct.–5 Dec.	
	13		
Eastern Bluebird		516 Oct.–16 Dec. 1226 Oct.–16 Dec.	
Turkey Vulture	11	1226 Oct.–16 Dec. 156 Nov.–19 Dec.	
Sandhill Crane	10	190 Nov.–19 Dec.	

Table 3. Arrivals and departures of spring transients, Baraboo Hills, 1986–2005. N = Number of Years, MD = Median Date, \* = Devil's Lake only

		Arrivals		Departures		
Species	N I	MD Range	N	MD	Range	
Common Goldeneye*	1230 Ma	r. 10 Mar.–4 Apr.	12 19 7	Apr.	29 Mar.–2 May	
Common Loon*	16 3 Apı	: 17 Mar.–28 Åpr.	17141	May	20 Apr.–10 Jun.	
Blue-headed Vireo	94 May	1 May–10 May	8 8 1	May	1 May–13 May	
Golden-crowned Kinglet	1524 Ma	r. 14 Mar.–11 Apr.	$1626  \mathrm{A}$	Apr.	6 Apr.–7 May	
Ruby-crowned Kinglet	16 6 Apr	20 Mar.–17 Apr.	17141	May	4 May–21 May	
Gray-cheeked Thrush	89 May	1 May–21 May	8 17 1	May	11 May-21 May	
Swainson's Thrush	168 May	25 Apr.–15 May	16 18 1	May	7 May-26 May	
Hermit Thrush	175 Apr.	23 Mar.–16 Apr.	17 11	May	17 Apr.–10 May	
Tennessee Warbler	164 May	23 Apr.–13 May	16231	May	16 May-27 May	
Orange-crowned Warbler	101 May	21 Apr.–20 May	10 61	May	23 Apr.–21 May	
Northern Parula	158 May	19 Apr.–21 May	15 14 1	May	3 May-21 May	
Cape May Warbler	87 May	30 Apr.–16 May	8 12 1	May	30 Apr16 May	
Yellow-rumped Warbler	1713 Apı	: 31 Mar.–18 Apr.	18 15 1	May	9 May-27 May	
Pine Warbler	1225 Apı	: 20 Apr.–1 May	1228I	Apr.	20 Apr12 May	
Palm Warbler	1725 Apı	: 14 Apr.–1 May	17131	May	3 May-21 May	
Bay-breasted Warbler	913 Ma	y 6 May–19 May	9 15 1	May	6 May-22 May	
Blackpoll Warbler	1514 Ma	y 4 May–22 May	15211	May	6 May-27 May	
Northern Waterthrush	1727 Apı	: 18 Apr.–9 May	17171	May	1 May-27 May	
Wilson's Warbler	1513 Ma	y 2 May–19 May	15171	May	13 May-26 May	
Fox Sparrow	1522 Ma	r. 7 Mar.–10 Apr.	1517 I	Apr.	10 Apr.–22 Apr.	
White-throated Sparrow	1717 Apı	: 27 Mar.–22 Apr.	17141	May	9 May–22 May	
White-crowned Sparrow	126 May	20 Apr.–16 May	12 14 1	May	7 May–19 May	

Table 4. Arrivals and departures of fall transients, Baraboo Hills, 1986–2005. N = Number of Years,  $MD = Median\ Date$ , \* = Devil's Lake only.

		A	rrivals		Departures		
Species	N	MD	Range	N	MD	Range	
Common Goldeneye*	1931 Oct.		15 Oct.–27 No	v. 1915	Dec.	27 Nov4 Jan.	
Common Loon*	173 N	lov.	24 Aug20 De	c. 1621	Nov.	18 Oct.–27 Dec.	
Blue-headed Vireo	1026	Sep.	29 Aug6 Oct.	1030	Sep.	14 Sep.–8 Oct.	
Golden-crowned Kinglet	1625	Sep.	13 Sep.–30 Sep		Nov.	29 Oct.–16 Dec.	
Ruby-crowned Kinglet	1718	Sep.	9 Sep.–29 Sep	o. 1731	Oct.	17 Oct.–6 Nov.	
Gray-cheeked Thrush	629	Sep.	24 Sep.–3 Oct.	629	Sep.	24 Sep3 Oct.	
Swainson's Thrush	1727	Aug.	1 Aug.–16 Sep	o. 1630	Sep.	15 Sep.–10 Oct.	
Hermit Thrush	1729	Sep.	25 Sep7 Oct.	1727	Oct.	16 Oct.–13 Nov.	
Tennessee Warbler	1723	Aug.	21 June-16 Sep	o. 19 4	Oct.	18 Sep12 Oct.	
Orange-crowned Warbler	1630	Sep.	22 Sep.–11 Oc	t. 1610	Oct.	24 Sep.–20 Oct.	
Northern Parula	47 8	Sep.	27 Aug.–16 Sep	o. 47	Sep.	27 Aug16 Sep.	
Cape May Warbler	118.8	Sep.	19 Aug.–24 Sep	o. 11 8	Sep.	19 Aug26 Sep.	
Yellow-rumped Warbler	1714	Sep.	20 Aug30 Sep	o. 19-1	Nov.	19 Oct.–23 Nov.	
Palm Warbler	1713	Sep.	31 Aug.–28 Sep	o. 17 9	Oct.	26 Sep20 Oct.	
Bay-breasted Warbler	132.5	Sep.	23 Aug.–26 Sep	o. 1115	Sep.	6 Sep.–29 Sep.	
Blackpoll Warbler	929	Aug.	24 Aug4 Oct.	914	Sep.	28 Aug.–11 Oct.	
Northern Waterthrush	139  S	Sep.	18 Aug3 Oct.	1324	Sep.	22 Aug.–14 Oct.	
Wilson's Warbler	511	Sep.	23 Aug.–17 Sep	o. 511	Sep.	30 Aug17 Sep.	
Fox Sparrow	154 (	Oct.	29 Sep.–16 Oc	t. 18 6	Nov.	23 Oct.–18 Nov.	
White-throated Sparrow	1815	Sep.	1 Sep.–29 Sep	o. 18 2	2 Nov	19 Oct.–14 Dec.	
White-crowned Sparrow	131 (	Oct.	23 Sep.–13 De	c. 1318	Oct.	23 Sep13 Dec.	

Swainson's Thrush can be expected for about a 10 day period in spring, and in fall from late August to late September; Hermit Thrush peaks in April and October. Some warblers (Northern Parula, Cape May, Wilson's) are found for a week or so in spring, but in fall generally on only a single day. Others (Orange-crowned, Bay-breasted, Blackpoll) are noted for several days to a week or so in spring, and for 2 weeks or so in fall. Three species (Tennessee, Palm, Northern Waterthrush) are found for close to 3 weeks in spring; in fall, Tennessee Warbler occurs over a 6 week period, Palm Warbler for about 4 weeks, and the waterthrush for about 2 weeks. The warbler with the longest stretch of migratory passage is always the Yellow-rumped: a month or so in spring, and approximately 7 weeks in fall. Fox Sparrow and White-throated Sparrow are found for about a month in spring, with the Fox Sparrow peaking a month or so before the white-throat; White-throated Sparrow in fall is found for some 7 weeks, or about 3 weeks longer than the Fox Sparrow. White-crowned Sparrow is found in a given spring for a week or so, and in a given fall for 2-3 weeks.

In any discussion of bird migration, short-distance and long-distance migration should be addressed. Short-distance migrants are those species that travel less than 1,000 miles between the centers of their summer and winter ranges, and long-distance migrants are those species that travel more than 1,000 miles (Temple and Cary 1987). Short-distance migrants winter mainly in the southern United States, and long-distance migrants winter south of the United States (Butler 2003). The passage of short-

distance migrants can usually be correlated with temperature on the wintering ground, which would vary between years, whereas the passage of long-distance migrants is primarily influenced by such innate mechanisms photoperiod and biological rhythms, which would not vary between years. In tropical latitudes the conditions that indicate the time of year presumably are unreliable or change imperceptibly, making an internal clock essential for initiating migration (Hagen, Lloyd-Evans, and Atwood 1991). These birds therefore should arrive in Wisconsin at about the same time each year, whereas the arrival of short-distance migrants should be more variable.

This pattern is illustrated by the thrushes (Table 5). Of the seven species herein treated, the three short-distance migrants (Eastern Bluebird, Hermit Thrush, American Robin) have arrival dates from 4–7 days early, whereas the 4 long-distance migrants (Veery, Gray-cheeked Thrush, Swainson's Thrush, Wood Thrush) have arrival dates ranging from 2 days early to a day late.

Summer residents and transients are grouped together and arranged systematically in Table 5. Based upon median dates, a total of 71 of the 82 species had earlier arrival dates in the period 1980–2005 than in the period 1966–1979: 9 species had arrival dates earlier by a week or more, 39 species had arrival dates earlier by 3–6 days, and 23 species had arrival dates earlier by a day or two. Of the remaining 11 species, 6 species had the same median date, and 5 species had a median date later by a day.

The 9 species with median dates earlier by a week or more were the fol-

Table 5. Spring arrival of birds in the Baraboo Hills, 1966-1979 and 1980-2005. N = Number of years, MD = Median Date, \* = Devil's Lake only, e or l = early or late in days for the period 1980-2005 compared to the period 1966-1979.

	196	66–1979	1980	0-2005	Change	
Species	N	MD	N	MD	e or l	
Wood Duck	8	1 Apr.	15	24 Mar.	8 e	
Common Goldeneye*	12	9 Apr.	18	30 Mar.	10 e	
Common Loon*	13	11 Apr.	22	4 Apr.	7 e	
Green Heron	10	4 May	22	30 Apr.	4 e	
Turkey Vulture	13	24 Mar.	21	12 Mar.	12 e	
Broad-winged Hawk	14	21 Apr.	23	18 Apr.	3 е	
Sandhill Crane	7	20 Mar.	14	9 Mar.	11 e	
Killdeer	7	15 Mar.	15	9 Mar.	6 e	
Spotted Sandpiper	14	2 May	23	28 Apr.	4 e	
American Woodcock	14	18 Mar.	17	16 Mar.	2 e	
Black-billed Cuckoo	9	19 May	17	14 May	5 e	
Yellow-billed Cuckoo	11	20 May	16	17 May	3 e	
Common Nighthawk	10	11 May	19	10 May	1 e	
Ruby-throated Hummingbird	10	15 May	19	7 May	8 e	
Eastern Wood-Pewee	14	15 May	22	11 May	4 e	
Acadian Flycatcher	12	18 May	19	15 May	3 e	
Least Flycatcher	14	4 May	22	2 May	2 e	
Eastern Phoebe	13	27 Mar.	21	25 Mar.	2 e	
Great Crested Flycatcher	13	9 May	22	6 May	3 e	
Eastern Kingbird	12	10 May	23	7 May	3 e	
Yellow-throated Vireo	14	5 May	23	4 May	1 e	
	11	,	15	,	11	
Blue-headed Vireo		5 May	23	6 May	2 e	
Warbling Vireo	14	5 May	23 23	3 May		
Red-eyed Vireo	14	15 May		10 May	5 e	
Tree Swallow	5	12 Apr.	19	1 Apr.	11 e	
Barn Swallow	9	24 Apr.	20	21 Apr.	3 e	
House Wren	13	24 Apr.	21	25 Apr.	11	
Winter Wren	13	6 Apr.	21	31 Mar.	6 e	
Golden-crowned Kinglet	11	30 Mar.	21	27 Mar.	3 e	
Ruby-crowned Kinglet	13	10 Apr.	22	7 Apr.	3 e	
Blue-gray Gnatcatcher	14	2 May	23	25 Apr.	7 e	
Eastern Bluebird	9	18 Mar.	16	11 Mar.	7 e	
Veery	12	8 May	20	9 May	11	
Gray-cheeked Thrush	12	10 May	12	8 May	2 e	
Swainson's Thrush	13	6 May	21	6 May	_	
Hermit Thrush	11	12 Apr.	23	6 Apr.	6 e	
Wood Thrush	14	6 May	23	4 May	2 e	
American Robin	14	9 Mar.	21	5 Mar.	4 e	
Gray Catbird	14	3 May	23	3 Мау	_	
Brown Thrasher	13	21 Apr.	23	19 Apr.	2 e	
Blue-winged Warbler	13	9 May	20	4 May	5 e	
Golden-winged Warbler	14	9 May	21	10 May	1 1	
Tennessee Warbler	14	8 May	22	3 May	5 e	
Orange-crowned Warbler	10	1 May	15	1 May	_	
Nashville Warbler	14	2 May	22	30 Apr.	2 e	
Northern Parula	13	8 May	21	5 May	3 e	
Yellow Warbler	12	3 May	23	1 May	2 e	
Chestnut-sided Warbler	14	10 May	22	7 May	3 e	
Magnolia Warbler	14	11 May	22	9 May	2 e	
Cape May Warbler	10	10 May	12	7 May	3 e	
Yellow-rumped Warbler	14	13 Apr.	23	12 Apr.	1 e	
Black-throated Green Warbler	14	4 May	23	30 Apr.	4 e	
		/			(Continue	

Table 5. (Continued).

	196	66–1979	198	Change	
Species	N	MD	N	MD	e or l
Blackburnian Warbler	14	10 May	22	7 May	3 e
Pine Warbler	4	29 Apr.	16	26 Apr.	3 e
Palm Warbler	14	28 Apr.	23	26 Apr.	2 e
Bay-breasted Warbler	11	15 May	12	13 May	2 e
Blackpoll Warbler	14	13 May	20	13 May	_
Cerulean Warbler	12	8 May	20	6 May	2 e
Black-and-white Warbler	14	1 May	23	26 Apr.	5 e
American Redstart	14	11 May	22	8 May	3 e
Ovenbird	14	4 May	23	2 May	2 e
Northern Waterthrush	14	1 May	23	28 Apr.	3 e
Louisiana Waterthrush	14	18 Apr.	23	15 Apr.	3 e
Mourning Warbler	14	19 May	21	15 May	4 e
Common Yellowthroat	12	6 Mav	23	4 May	2 e
Wilson's Warbler	14	15 May	21	13 Mav	2 e
Canada Warbler	14	13 May	21	10 May	3 e
Scarlet Tanager	14	10 May	22	7 May	3 e
Eastern Towhee	10	15 Apr.	23	15 Apr.	_
Chipping Sparrow	12	19 Apr.	23	14 Apr.	5 e
Field Sparrow	11	9 Apr.	22	10 Apr.	11
Fox Sparrow	11	24 Mar.	21	20 Mar.	4 e
Swamp Sparrow	7	22 Apr.	20	20 Apr.	2 e
White-throated Sparrow	13	19 Apr.	23	17 Apr.	2 e
White-crowned Sparrow	5	8 May	15	6 May	2 e
Rose-breasted Grosbeak	13	4 May	23	30 Apr.	4 e
Indigo Bunting	14	11 May	23	8 May	3 e
Bobolink	12	8 May	21	3 May	5 e
Red-winged Blackbird	11	12 Mar.	20	11 Mar.	1 e
Common Grackle	13	15 Mar.	20	9 Mar.	6 e
Brown-headed Cowbird	9	27 Mar.	17	27 Mar.	_
Baltimore Oriole	13	4 May	23	30 Apr.	4 e

lowing: Wood Duck, Common Goldeneye and Common Loon, Turkey Vulture, Sandhill Crane, Rubythroated Hummingbird, Tree Swallow, Blue-gray Gnatcatcher, and Eastern Bluebird. The goldeneye and loon dates are for Devil's Lake, and they coincide with an earlier ice-out on this lake: the median date for ice-out on Devil's Lake for the period 1966–1979 was 12 April, and for the period 1980-2005 it was 3 April. The only long-distance migrant in this group is the hummingbird; all the others are short-distance migrants.

Another group of short-distance migrants also arrived notably early (5–6

days): Killdeer, Winter Wren, Hermit Thrush, Chipping Sparrow, and Common Grackle.

But a total of 7 species of long-distance migrants also arrived notably early. In addition to the hummingbird (8 days early), these 6 species all arrived 5 days early: Black-billed Cuckoo, Red-eyed Vireo, Blue-winged Warbler, Tennessee Warbler, Black-and-white Warbler, and Bobolink.

A total of 13 short-distance migrants and 7 long-distance migrants had arrival dates earlier by at least 5 days for the period 1980–2005 compared to the period 1966–1979 (Table 5). Statistical significance (P<.05) was found

for 8 of the 13 short-distance migrants (Wood Duck, Common Goldeneye, Common Loon, Turkey Vulture, Tree Swallow, Blue-gray Gnatcatcher, Eastern Bluebird, and Chipping Sparrow), and for 6 of the 7 long-distance migrants (Black-billed Cuckoo, Rubythroated Hummingbird, Red-eyed Vireo, Blue-winged Warbler, Blackand-white Warbler, and Bobolink). For the entire 40 year period 1966–2005, statistical significance (P<.05) was found for 6 of the 13 short-distance migrants (Common Goldeneye, Turkey Vulture, Sandhill Crane, Tree Swallow, Blue-gray Gnatcatcher, and Chipping Sparrow), and for 3 of the 7 long-distance migrants (Ruby-throated Hummingbird, Redeyed Vireo, and Blue-winged War-

An analysis of bird migration from a 100 acre farm in Massachusetts for the period 1970–2003 revealed a similar pattern: 2 short-distance migrants (Wood Duck and Chipping Sparrow), 2 long-distance migrants (Rubythroated Hummingbird and Ovenbird), and an intermediate migrant (House Wren) exhibited statistically significant earlier arrival dates for the 33 year period, based upon mean dates (Petersen and Anderson 2005).

Are these long-distance migrants here and in Massachusetts still leaving their wintering ground at essentially the same time, but accelerating their journey in response to warming conditions along the way? The critical point is that representatives from each migrant group are arriving earlier in spring. Seasonal migration is not fixed in time, and natural selection can be expected to continue to modify bird behavior in response to environmental change.

#### ACKNOWLEDGMENTS

This paper would have been less reliable without the statistical analysis, and for this I am indebted to Ann B. Swengel, who did all the data basing and testing, and to Scott R. Swengel, who independently verified all the tests. It is a pleasure to be able to acknowledge their overall contribution.

For sharing their records, I am indebted to the following individuals: Olga Bassett, Margaret Brittingham, David J. Cox, Raymond J. Dischler, John Exo, Martha Harding, Lisa Hart-Hereford. man. Scott Aaron Holschbach, Michael J. Johnson, Harold Kruse, Esther E. Lange, Robert McGann, Obert Mielke, Michael J. Mossman, Edward W. Peartree, Todd Persche, Ronald A. Rich, Betty Thiessen, and Scott R. Swengel.

Seasonal Reports from the Passenger Pigeon were also checked regularly for migration records for the study area.

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Ken Lange was the Naturalist at Devil's Lake State Park from 1966–1996. He served as Winter Field Note Compiler of the Passenger Pigeon for 27 years, and was the recipient of the Silver Passenger Pigeon Award in 1993. Ken is a member of numerous natural history and environmental organizations, and has long been active in the Wisconsin Chapter of The Nature Conservancy. He lives in Baraboo with his wife, Esther, and continues to enjoy big puffy clouds, big shaggy dogs, and Irish music.



American Tree Sparrow by Tom Sykes

# First Record of Parasitism and Unusual Time of Laying for the Brown-headed Cowbird (Molothrus ater) at the Nest of a Hooded Merganser (Lophodytes cucullatus)

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#### ABSTRACT

We report an observation of a Brownheaded Cowbird (Molothrus ater) laying in a nest box occupied by a Hooded Merganser (Lophodytes cucullatus). The cowbird laid at 2200h CST on 28 April 2007 atop the incubating female meganser. The merganser clutch consisted of 12 eggs. The cowbird egg was not seen during a subsequent check of the nest contents on 30 May. Based on the inappropriateness of the host, the unusual time of day for laying, and the date, we suggest the cowbird may have been unsuccessful at locating the nest of a more suitable host. This represents the 246th known victim for this cowbird species, and the first cavity-nesting duck species to be parasitized.

Accounts of the species parasitized by cowbirds of the genus Molothrus are noteworthy because they illustrate plasticity in the egg laying behavior among these species. Generalist host use imparts benefits and costs; the latter can involve loss of eggs laid in the nests of inappropriate hosts and diminished potential for evolving traits to overcome certain host defenses and/or increase success with a certain host (Rothstein 1990). Therefore, in the interest of documenting the diversity of species parasitized by the Brown-headed Cowbird (M. ater), we report here the first record of the cowbird laying at the nest of a Hooded Merganser (Lophodytes cucullatus).

Cathy Gagliardi maintains 4 nest boxes for use by Wood Ducks (*Aix sponsa*) within a 2-ha area around a cabin in Birchwood (45° 39′ N, 91° 33′ W), Sawyer County, Wisconsin. She regularly observes activity at these boxes using a Night Owl<sup>TM</sup> infrared nest cam attached to a 30 m cable that is connected to a television in the cabin for monitoring. The camera is equipped with infrared diodes that illuminate objects for digital viewing using light wavelengths that are not known to be detected visually by vertebrates.

On 28 April 2007, Cathy watched a nest box that had previously been visited by both a Wood Duck (last seen in the box 22 April) and a Hooded Merganser (first seen 9 April). At approximately 2000h CST, Cathy observed a Hooded Merganser on the nest and then switched the video channel leaving the audio feed on. She heard a rustling sound at approximately 2200h, turned on the nest cam video, and observed a female Brown-headed Cowbird atop the merganser. The cowbird was present for about 2 min during which she laid an egg and then departed. Cathy saw the egg as it dropped from the cowbird onto the merganser, which remained motionless. The egg was seen 3 min later when the merganser stood and rotated the eggs. The merganser probed the corner of the nest box with her bill, where the smaller cowbird egg was visible. The egg was no longer visible, when the merganser lifted her head, suggesting that it was worked into the nesting material.

Cathy did not return to monitor the nest until 1 May. The nest was determined to be inactive on 30 May and Cathy checked its contents and was unable to detect any pieces of cowbird eggshell. However, she found the flattened, partially decomposed body of a

nestling much smaller than that of a merganser.

This is the first record of a cowbird laying at the nest of a cavity-nesting duck; however, Brown-headed Cowbirds have also laid at the nests of other ducks including the Bluewinged Teal (Anas discors) (Hamilton 1957) and Lesser Scaup (Aythya affinis) (Koons 2000). Typically, cowbirds parasitize passerines that feed altricial young a diet of insects (Friedmann and Kiff 1985). The Mourning Dove (Zenaida macroura) is the only non-passerine known to have reared a Brown-headed Cowbird (Friedmann and Kiff 1985). Therefore, we consider this observation to reflect an extraordinary case where the cowbird was likely laying her egg in the duck nest box due to lack of more appropriate nests.

Our interpretation is supported by the unusual timing of laying as Brownheaded Cowbirds typically lay before true sunrise (Scott 1991, Sealy et al. 1995, Ellison and Sealy 2007). The relatively early laying date suggests that nests of few passerines would have been available. Among open-cup nesting passerines, typically, only Song Sparrow (*Melospiza melodia*), Northern Cardinal (Cardinalis cardinalis), and Eastern Meadowlark (Sturnella magna) commence nesting during April in northern Wisconsin (Cutright et al. 2006). We believe that this record of parasitism should be considered as one of another "victim" rather than a "host," as the term reflects that a species has received cowbird eggs in their nests, but are not known to have reared cowbirds (Lowther 1993). With the addition of the Hooded Merganser as a victim of the Brownheaded Cowbird, 246 species are now known to have received Brownheaded Cowbird eggs in their nests (Lowther 2007).

#### ACKNOWLEDGMENTS

We thank S. G. Sealy for reviewing an earlier draft of the manuscript and P. E. Lowther for maintaining an active list of the species victimized by cowbirds.

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Kevin Ellison obtained his B.S. at the University of Illinois, Champaign-Urbana, where he learned to find and monitor bird nests. His interest in avian reproductive behavior led him to assist several research projects across the continent, Hawaii, and Australia, before he settled on the University of California, Riverside for his M.S. In California, Kevin studied the relative impacts of cowbird parasitism and nest predation on 4 sparrow species nesting in coastal sage scrub. He then completed his Ph.D. at the University of Manitoba, where he studied host use by Brown-headed and Bronzed Cowbirds in Texas. Kevin worked for the Department of Forest and Wildlife Ecology at the University of Wisconsin, Madison 2005-08, where he studied grassland birds and their nest predators. Kevin now works for the Wildlife Conservation Society, based in Bozeman, Montana, where he manages projects studying the relationships between birds and bison. Kevin has published several articles on cowbird reproduction.

Cathy Gagliardi considers herself an avid birder and works at Wild Birds Unlimited as a Certified Birding Specialist. Her true passion for birds started 10 years ago when she and her husband began building their lake home in northwest Wisconsin. Seeing so many different species at one feeder 10 years ago, has led to 28 more bird feeders, 2 bird baths, more bird books, various bird houses, and raising mealworms for her favorite species, the Baltimore Oriole. She has whistle-trained 2 females to come for handfeedings. In 2006 and 2008, Cathy had 3 nesting pairs at her home in St. Paul and has counted at least 63 fledged young over the past 8 years. When the live-cam was installed in one of their four Wood Duck boxes it gave Cathy and her husband a new meaning for wildlife "watching" and a rewarding one at that.



Bald Eagle by Tom Sykes

### 50 Years Ago in The Passenger Pigeon

My copy of this issue contains a Subscription Renewal Blank-rates were Student-\$1.50, Active-\$2.00, Joint-\$3.00, Sustaining-\$5.00, Life-\$75.00, and Patron-\$100.00.

A. W. Schorger authored a short article detailing the extirpation of a flock of Wild Turkeys in Adams County and details the early efforts to restore Wisconsin's turkey population. The first recorded release was of 39 turkeys in 1929. These were turkeys raised in a game farm. Over the next 10 years, the total number planted was 2,942, all in Grant and Sauk Counties. Birds roamed to Adams County in 1937 where they persisted until 1958.

Schorger discusses the difficulties in restoring Wild Turkeys. "All game farm Eastern Wild Turkeys necessarily contain some domestic blood as the pure race was inherently too wild to be raised in captivity in satisfactory number. Any admixture of wild and domestic stock results in reduced wariness and ability to cope with the hazards of living under natural conditions. If there are domestic turkeys in the same area further crossing is bound to occur. The persistent long nesting season of the Sauk County birds is a strong indication of increased domesticity. Diseases acquired from the domestic fowls are particularly destructive. Then we have poaching, which in spite of all efforts in conservation, remains a perennial evil."

Wouldn't Schorger be amazed at today's population of Wild Turkeys in Wisconsin!

Excerpt from Vol. 20(4), 1958 by WSO Historian Noel J. Cutright, 3352 Knollwood Road, West Bend, WI 53095. h. 262 .675. 2443, w. 262. 268. 3617, noel.cutright@we-energies.com.



Common Yellowthroat by Tom Sykes

# Lessons From the Seasons: Winter 2007–2008

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Record snowfall and a redpoll invasion, including numerous Hoary Redpoll numbers, permeated the bird chat room discussions. Obviously, there must be a correlation between harsh winters with heavy snowfall and redpoll movements. The answer to the postulation is a resounding no.

While southern Wisconsin had abundant snow, the northern tier and especially into Ontario had normal or even below normal snowfall and near normal temperatures. A look back at other redpoll invasion years indicates a similar pattern. The winter of 1981–82 had near normal or slightly below normal snowfall in the Midwest and Ontario. A similar event occurred in the winter of 1997–98 with Madison having slightly above normal snowfall, but the boreal transition had well below normal snowfall. Both of these winters had redpolls arrive early and in high numbers.

If it is not weather, then it must be a paucity of food. The answer for redpolls is not as obvious as it may seem. A study by Koenig and Knops (2001) indicates high densities of redpolls are more important than current year seed crop failure. They conclude a combination of high seed crops combined with

excellent redpoll productivity, then followed by a poor seed crop is needed for the largest irruptions.

Both redpoll species appear to react differently than other boreal irruptive species—Red and White-winged Crossbills, Pine Grosbeak, Pine Siskin, Evening Grosbeak, and Red-breasted Nuthatch. These species are more attuned to conifer seed crops. They feed more selectively on different species of conifers, thus they have different patterns of irruption. Conversely, redpolls feed on deciduous tree and weed seeds almost exclusively.

During fall, winter, and spring, redpolls are almost entirely vegetarian. Primary food sources are birch, alder, willow (Bent 1968), and weed seeds, especially during irruptive years. Decades ago, such weeds as ragweed, goosefoot, smartweed, and pigweed (Martin et al. 1961) formed a majority of the winter diet (Martin et al. 1961). In more recent decades, the primary winter food may be niger seed (Henderson 1995).

The biology of redpolls' favored foods may be telling. Birch, mostly white [paper] birch, but occasionally yellow and bog birch, flowers in spring with catkins providing a possible food

source during the time of little food. The seeds ripen in August and disperse before the end of October, thus providing an abundant food source for a short period of time in fall. Birch seed production is not constant and peaks every other year. Alder seed develops in late summer and hangs unto the branches throughout the winter. The little cones house the seed that in normal winters provide the primary winter food for redpolls. Alder tends to have a bumper crop of seed every fourth year. Willow blooms early and sets its shortlived seeds in May and June, which provides a brief and important food source before the bugs come out.

The predominant food in summer is animal, providing a rich protein-filled diet for growing youngsters. Of course, during all parts of the year weed seeds are gleaned from openings and edges for added sustenance. Given the combined facets of the food and its somewhat predictable nature, a pattern of predictability should be in the offing.

A shortage of the food sources is not an absolute predictor of irruptive behavior. The massive invasion of 1981–82 and the four-year alder seed nadir would indicate subsequent invasion in 1989–90, 1993–94, 1997–98, 2001–02, 2005–06, and 2009–10. With the big invasion of 2007–08, the correlation to poor seed crops alone is not hard to see.

To make predictions months in advance requires productivity information for at least two years. In addition, information on alder seed production would be needed to make more accurate predictions. To date, the birding community and foresters are doing a poor job of collecting both types of data.

When the invasion gets closer, we do have better methods for determining the prospects of seeing redpolls. Ebird data from the past five years can help give a first glimpse of insight. Early trend data indicate if big flocks of redpolls are reported from the north in late October to mid-November, the southern part of the state can reasonably expect redpolls by winter's end.

A lag effect takes place, with the south not seeing any real frequent numbers until mid-January. Peak numbers usually occur in the middle part of February and some individuals stick around to late March.

If the initial numbers in fall are small, the prospects for Hoary Redpoll are equally small to non-existent. Big numbers of Common Redpoll should alert birders and purveyors of seeds for feeders to keep an eye out for Hoary Redpoll, although not at the same time. Curiously and cautiously looking at the data indicates southern Wisconsin should anticipate some Hoary Redpolls during the mid-January push. However, and confounding, the north really does not have any Hoary Redpolls until mid-February. This potential phenomenon has scant data and needs more attention in the future.

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### The Winter Season: 2007–2008

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#### INTRODUCTION

First I would like to extend an enormous Thank You to Ken Lange, retired naturalist from Devil's Lake State Park, for his many years of service compiling the Winter Season Report for the Passenger Pigeon. His knowledge, insight, and dedication to the birds of Wisconsin will be missed. After 27 years of compiling observer's records and providing expertise about species distribution, he has stepped down from this volunteer position. I remember one of the first times that I met Ken at Devil's Lake. It was a cool May day in the early 1990s just after a weather front had passed through southern Wisconsin. Warblers and other migrants were literally dripping from the trees along Messinger Creek which is the southwest inlet to the lake. We identified dozens of individuals for an hour or more. As those of you who can remember a day just like this one, we both felt so privileged to have been there. I was fortunate to spend many more days birding at this state park, but never again have I had the numbers that we experienced that dav.

I have lived with my husband, Bob,

in the far southeast section of Florence County in northeast Wisconsin for the past 3 years. Before moving to Aurora, I had lived my entire life in Dane County. My experience with birding began as a child living in rural Middleton. I fondly recall the rich burbling song of the Western Meadowlark as I explored the outdoors at our home. The farm where I was raised is no longer home to the meadowlark, but is now home to many condominiums and a golf course. I observed, listened, and appreciated all wildlife as I grew up, but never actually identified birds with the aid of binoculars until much later. After raising my family and experiencing the "empty nest syndrome" as my firstborn left for college in the early 1980s, I decided to take a beginning bird watching class offered from the UW Extension Department lead by Jim Harris. One of our first field trips in May was to Cherokee Marsh, a lovely park on the northeast side of Madison. As the group walked along a well worn path, Jim would point to the direction of a bird song and call out the name of the bird without even seeing the bird! This ability so astounded me that I decided that I would one

day like to be able to identify bird songs just like Jim. Now over 30 years later I am retired and able to spend most of my days looking at and listening to birds. Through the years many many people in the birding community of Wisconsin have encouraged and helped me achieve some of my birding goals. I have been quite privileged to walk with dozens of expert birders along the way. For these opportunities I am truly grateful.

Now I have agreed to attempt to fill this position with the knowledge that I am not as well read about population trends and distribution of birds as others. As when I first began this birding journey, I will need to depend on others to help me. I would like to thank all of those that have helped with this report including Bob Domagalski, Bettie Harriman, Randy Hoffman, Ken Lange, Mark Peterson, and Tom Soulen.

#### WEATHER

Perhaps the winter of 2007–2008 will be remembered as an old-fashioned winter with many storms and snow measured in feet rather than inches. Unlike the winter season last year when there was little or no snow during the early part of the period, this year all of Wisconsin had snow cover for most of the season. A major snowstorm dumped 7–10" of snow on most of the state on 1 December to begin the winter season. Temperatures then remained in single digits for several days. On 3 December Florence County in northeastern Wisconsin received another 1-2" of snow, but temperatures reached into the low 20s. By 5 December southern Wiscon-

sin received several more inches of snow with Milwaukee County measuring another 4". Temperatures remained about 10 degrees below normal with highs in the teens. During the middle of December northeastern Wisconsin remained colder than normal with lows below 0 and highs in the low 20s. By December 28 another inch of snow fell in northeastern Wisconsin while 3 storms dumped more snow in southern Wisconsin. Karen Etter Hale describes weather of Jefferson County as "the most unusual winter we've ever experienced, with some of everything, but especially snow and hoarfrost." She states that with both snow and rain, total precipitation for December was 5.16". She also noted that they had "snow-fog rising off the snow and at least 4-5 days of gorgeous hoarfrost." In Appleton Daryl Tessen noted their area received 75" of snow, which was the 2<sup>nd</sup> most in the history of the area. He also stated that cold temperatures ranged from 10-20 degrees below normal with wind chills at 30-45 degrees below zero F.

In the first 2 weeks of January northeastern Wisconsin experienced milder temperatures with some above freezing temperatures and precipitation in the form of rain. Then on 13 January a snowstorm left another 5" on the ground. In southern Wisconsin Karen Etter Hale noted that temperatures reached 51 degrees on 7-8 January. A thunderstorm with .92" of rain melted all the snow remaining on the ground. But, soon several more snowstorms added another 14.5" of snow. During the latter half of the month temperatures in her area ranged from 8 degrees on 19 January to 45 degrees on the 28th, then back down to 8 de-

grees on the 30th. Northwestern Wisconsin experienced below zero temperatures with highs in single digits 20-24 January. A blizzard with 3" of snow, but winds above 30 miles per hour and temperatures ranging from -14 degrees to a high of 0 ended the month. Judy Haseleu from Washburn County in northwestern Wisconsin stated that her area experienced many below zero days and nights. She also noted that although their area was snow covered to a depth of 1.5 feet throughout the winter season, they didn't receive as much snow as southern Wisconsin.

The first week of February introduced warmer temperatures to Florence County, but brought 2 more snowstorms totaling 5". Dane County received 20" and Jefferson County received .42" of rain followed by 15" of snow during the same time period. Florence County received 3 more inches of snow on 9 February, 2" on 14 February, and another 5" on 17 February. Low temperatures in northeastern Wisconsin from 11 February through the 17th remained below zero except for the 14th when 2" of snow fell. On 17 February 11" of snow fell in Dane County, and 1.25" of rain plus 3" of snow fell in Jefferson County. Consistently the southern third of the state received more precipitation than the northern portion of the state this winter. By 29 February southern Wisconsin was beginning to thaw with temperatures in the 40s, but snow depth in Florence County remained at 20".

#### **NOTABLE RARITIES**

Rarities included a female eider (sp.) seen 5 January during the WSO



Figure 1. Red-necked Grebe (left) and Western Grebe (right) on Lake Geneva, Walworth County, were photographed by Brian Hansen on 9 January 2008.

Milwaukee lakefront field trip near Bradford Beach in Milwaukee County by several observers. Harlequin Duck reports came from 3 counties: Kewaunee, Pierce, and TTP in Sheboygan. Scoters are increasingly common winter reports with all 3 species in 5 counties along Lake Michigan. Barrow's Goldeneye had multiple sightings of several birds, documented in 3 counties: Milwaukee, Pierce, and Sheboygan. The often elusive Gray Partridge was present in 6 counties. Spruce Grouse was found on 2 CBCs in Vilas County. Red-necked and Western Grebes (Fig. 1) were located on Lake Geneva in Walworth County. American White Pelican again wintered in Green Bay in Brown County. Jeff Bahls photographed an Ibis sp. at Theresa Marsh in Dodge County. A Spotted Sandpiper was documented on December 9-22 in Racine County by Rick Fare.

The Purple Sandpiper and Dunlin found in Racine County on 22 December was seen through December 31. A Lesser Black-backed Gull, an Old World species, was found in no less

than 8 counties. For the 2<sup>nd</sup> consecutive year a Slaty-backed Gull was present in the state, found in Douglas County at the Superior Landfill from 21 December through 8 February. Bernie & Dean Shumway from Door County hosted a White-winged Dove beginning in the fall season through 31 December. A Rufous Hummingbird was reported first by Steve Betchkal in September 2007 coming to a feeder in Eau Claire County. It was last reported 5 December. A Great Owl was observed, tographed, and banded by Bruce Bacon in Iron County on 18 December and a Boreal Owl was photographed by Ryan Brady on 9 February in Bayfield County in his back yard.

Black-backed Woodpeckers had a mini-invasion in Forest County plus records in 3 other counties: Langlade, Outagamie, and St Croix. An Eastern Phoebe was found on Poynette CBC in Columbia County. Carolina Wren, a southern species, seems now to be a permanent resident sighted in 9 counties this season. A Ruby-crowned Kinglet was found on 8 December in Iowa County. A nice surprise was the record number of Townsend's Solitaires seen in at least 11 locations around the state. Varied Thrush was found in 5 counties: Bayfield, Door, Dunn, Marathon, and Waupaca.

Northern Mockingbirds were found in Milwaukee County on that CBC and during the count week in Chippewa County, and also seen in 2 other counties, Racine and Waushara. Yellow-rumped Warblers were found on 3 CBCs and in 8 counties. Perhaps the most unusual species found in the winter season of 2007–2008 was

Townsend's Warbler; this passerine is normally seen only in the western United States. Richard Wanie reported this bird on 22 December 2007 and photographed it for inclusion in the Ft. Atkinson CBC in Jefferson County. Harris's Sparrow was found on 2 CBCs, in Kenosha and Milwaukee Counties. Rose-breasted Grosbeak was a count week bird found on Kenosha CBC in Kenosha County, plus reports from 3 other counties: Ashland, Iron, and Racine. A Baltimore Oriole was found in Door County BOP through 15 December. Hoary Redpolls were noted from 6 counties: Door, Florence, Iron, Outagamie, Ozaukee, and Washburn.

#### ANALYSIS

A total of 169 species was reported for the Winter Season of 2007-2008 compared to 173 from the previous year. In the 105 Wisconsin CBCs a total of 152 species was sighted plus 3 more count week birds. This species total compares to a record setting 156 in the 2006 CBCs. Multiple reasons are probable for the slightly lower numbers reported this year. Deeper snow depths were recorded throughout the state as related in the weather portion of this report. Greater snow depths make it more difficult for raptors and open field species to forage. The heavy snow also makes it more difficult for birders to go birding or gain access to small county roads that may not be plowed. Secondly, as a result of the extended drought in northern Wisconsin over the past 2 years, there were lower cone and seed crops which effectively reduced the number of birds found throughout this season

in the northern counties. For example, Red-breasted Nuthatch was reported in much lower numbers than usual across all of the northern counties. However, they appeared in larger than usual numbers in more southerly counties. Finch populations varied according to the availability of food supplies. Both crossbill species were rarely reported anywhere in the state. By late fall Purple Finch and Pine Siskin had virtually left Florence and Marinette Counties in northeastern Wisconsin with very few reports all across the northern tier of counties. (In the past 10 years that I have been birding Florence County, I have always observed both Purple Finch and Pine Siskin in large numbers throughout the winter season). American Goldfinch was also observed in greatly reduced numbers in northeastern Wisconsin, but continued to be observed as usual in central and southern counties. But, what a banner year it was for Pine Grosbeak! This species was reported in 23 counties with southernmost reports from Brown, Juneau, and Kewaunee Counties. With the widespread sightings of Common Redpoll this year many more sightings were reported of the uncommon Hoary Redpoll. My experience with these 2 species is when a flock of more than 30 Common Redpolls are observed, there is often at least one or two Hoary Redpoll present with them. Another welcome occurrence during this winter season in northeast Wisconsin were sightings of Pine and Evening Grosbeaks almost every day of birding in Florence, Forest, or Marinette Counties.

In reviewing the species list for the past several winter seasons, an interesting observation was noted. Sightings of Barrow's Goldeneye, Redthroated Loon, American White Pelican, Golden Eagle, Peregrine Falcon, Lesser Black-backed Gull, Eurasian Collared-Dove, Carolina Wren, and Townsend's Solitaire seem to be more and more common. Fifteen years ago in the WSO report of The Winter Season for 1992-93, 5 of the above 9 species were not even reported: Barrow's Goldeneye, Red-throated Loon, American White Pelican, Lesser Blackbacked Gull, and Eurasian Collared-Dove. Throughout the entire period in 1992-93 a total of only 7 Golden Eagles was reported in 4 counties. In the 2007-08 season, 31 individuals were reported on a single day (January 19) on the Golden Eagle Survey of the Upper Mississippi Watershed. Other eagle sightings came throughout the period from 7 counties. In the 1992-93 Winter Season, records came from just 2 counties for the Peregrine Falcon compared to sightings from 9 counties for the 2007-08 season. Sightings of Carolina Wren in the 1992-93 Winter Season came from 6 counties compared to 9 counties in the 2007-08 season. In the 1992-93 Winter Season, Townsend's Solitaire made an appearance at Devil's Lake State Park in Sauk County after not being reported since the 1989-90 winter. In comparison, this season the Solitaire was reported from 11 counties including the CBCs. Increasingly, birders expect to find these 9 species every winter in Wisconsin.

Unless otherwise stated the counties reporting species do not include data from Christmas Counts. These abbreviations are included in the species report: BOP=beginning of period; EOP=end of period; TTP=throughout the period; m. obs.=many

observers, and CBCs=Christmas Bird Counts.

## REPORTS (1 December 2007–29 February 2008)

Greater White-fronted Goose—None were found on the CBCs, then 1 on 19 January (Paulios), and 1 on 21 February (Marschalek), both in Dane County.

**Snow Goose**—Total of 114 individuals on 2 CBCs. Dane County 70 on 1 December (Yoerger) and 70 on 6 December (Matney), also 12 on 1 December in St Croix County (Brue), and 2 in Racine County on 1 January (Tessen).

Cackling Goose—Total of 48 individuals on 5 CBCs with maximum number of 27 from the Sauk City CBC. Other county reports from 5 counties: Manitowoc County 4 December (Sonitag), Kewaunee County 22 December (Schilke) 2 in Walworth County 1 January (Tessen), 2 in Waukesha County 28 January (Gustafson), and 3 in Dane County 16 February (McDowell).

Canada Goose—Reported in 38 counties, TTP in 12 counties; 15,000 reported 20 December from Green Lake in Green Lake County (Schultz); northernmost reports from Ashland, Bayfield, Barron, Burnett, Marinette, Oconto, Polk, Sawyer, and Washburn Counties.

Mute Swan—Total of 144 individuals on 15 CBCs, including 93 from the Washington Island CBC (Door County). Other county reports for 10 counties: Dane, Door, Green Lake, Milwaukee, Racine, Sauk, Shawano, Sheboygan, Walworth, and Waukesha with highest numbers 13 on 5 February in Dane County (Paulios).

**Trumpeter Swan**—Total of 286 individuals on 8 CBCs including 256 from the Hudson CBC (St Croix County). Other reports from 15 counties: Door County 6 on 3 December (Tessen), La Crosse County 4 on 15 December (Jackson), Dane County 29 December and 12 January (Evanson, Yoerger), Milwaukee County 2 on 31 December (Hansen), Iowa County 2 on 1 January (Holschbach), St Croix County 275 on 1 January (Persico), Shawano County 4 on 2 January (Tessen), Sauk County 12 January (Yoerger), Polk County 5 on 12 January (Haseleu) and 16 on 27 January (Maercklein), Pierce County 4 on 31 January (Wood), Douglas County 3 February (Roeth), Florence County 16 February Kavanagh), Barron County 10 on 20 February (Carlsen), Portage County 2 on 22

February (Martin), and Grant County 3 on 23 February (Yoerger). Two counties reported birds TTP. Barron and St Croix.

Tundra Swan—Total of 601 individuals on 7 CBCs with maximum number of 570 on the Madison CBC. TTP in Dane County (Evanson, Herb, Hodgeon, Martin, Paulios, Stutz, Tessen), Ozaukee County 25 on 1 December (Tessen), Vernon County 5 on 2 December (Jackson), Door County 150 on 3 December (Tessen), Green Lake County 2 on 13 December (Schultz), and Sheboygan County 14 December (Brasser).

Wood Duck—Total of 9 on 8 CBCs. Other reports in 5 counties: Marathon County 22 December (Backus), Sauk County 2 on 5 January (Holschbach), La Crosse County 10 January (Jackson), Dane County 2 on 12 January (Yoerger), and Ozaukee County 14 January (Szymczak).

**Gadwell**—Reported in 13 counties, which is more than twice as many counties as in the 2006-2007 season. Milwaukee County 20 on 8 December (Enernie), Outagamie County 2 on 10 December (Tessen), Waukesha County 8 on 21 December (Szymczak), Columbia County 29 December (Yoerger), St. Croix County 10 on 1 January (Persico), Sheboygan County from 29 December-16 January (Brasser, Goodman, Schaufenbuel), Walworth County 11 on 29 December (m. obs), Dane County 35 on 5 February (Paulios), Door County 7 February (Lukes), Iowa County 16 February (Holschbach), Ozaukee County 6 on 3 January and 3 on 24 February (Frank, Tessen), and Rock County 6 on 24 February (Yoerger).

American Wigeon—Total of 5 found on 2 CBCs, Ephraim(Door County) and Madison. Other sightings from 6 counties: Milwaukee County 2 on 8 December (Enernie), Sheboygan County 25 December (Evanson), Racine County 1 on 29 December (Fare), Walworth County 12 January (Goodman), Door County 17 January (Lukes), and Rock County 2 on 27 January (Yoerger).

American Black Duck—Maximum number of 348 on Green Bay CBC. Other reports in 27 counties ranging along the St. Croix and Mississippi Rivers, the Lake Michigan lakefront, and the southern portion of the state, with these northern counties reporting: Ashland, Barron, Florence, and Marinette. Reported TTP in Barron, Door, Manitowoc, St. Croix, and Sheboygan Counties. After the CBCs, highest number reported in Brown County 135 on 8 February (Paulios), Marinette County 30 on 18

February (Kavanagh), and Ashland County 22 on 12 February (Brady).

**Mallard**—Reported in 40 total counties and TTP in 13 counties with maximum number 1100+ BOP St. Croix County (Persico). Found in these northern counties: Ashland, Bayfield, Douglas, Florence, Marinette, and Polk.

**Blue-winged Teal**—One bird found BOP Door County (Lukes).

Northern Shoveler—Total of 387 individuals on 3 CBCs with maximum number 378 on the Madison CBC. Other reports from 6 counties: Jefferson County BOP (Etter Hale), 6 in Waukesha County BOP (Szymczak), Milwaukee County 2 on 2 December (Szymczak), Brown County 9 January (Kavanagh), Dane County 500 on 5 February (Yoerger), and Winnebago County 23 February (Uslabar).

Northern Pintail—Total of 10 individuals on 2 CBCs with maximum number 8 on the New Franken CBC (Brown County). Other reports from 7 counties: Door County BOP (Lukes), Sheboygan County BOP (Brasser, Tessen), Milwaukee County 12 December (Kapp), Chippewa County December 21 (Polk), Green Lake County 29 December (Schultz), Ozaukee County 5 January (Schultz), and Dane County 4 on 22 January and 2 on 28 February (Paulios, Thiessen).

Green-winged Teal—Total of 7 individuals on 4 CBCs with maximum number of 4 on the New Franken CBC. Other reports from 4 counties: Door County BOP through 3 February (Lukes), Sheboygan County BOP (Brassers, Tessen), Racine County 6 December (Fare), and Manitowoc County 9–21 January (Sontag).

Canvasback—Total of 70 individuals on 10 CBCs with maximum number of 29 on the Madison CBC. Other sightings in 10 counties: Door County BOP (Lukes), Jefferson County BOP-4 December (Etter Hale), Waukesha County 2 on 1 December (Szymczak), Dane County 30 on 1 December and 24 on 15 December (Evanson, Kamp, Kreitinger, Schneider), Buffalo County 9 December (Larson), Sheboygan County 1 January (Brassers), Shawano County 2 January (Tessen), Ozaukee County 3 on 3 January (Tessen), Marinette County 2 on 12 January (Campbell), and Walworth County 20 on 12 January (m. obs).

**Redhead**—Total of 102 individuals on 9 CBCs with maximum number of 88 on the Milwaukee CBC. Other sightings in 6 counties along Lake Michigan plus sightings in these 6 inland counties: Dane County 6 on 1 December

(Kamp), Waukesha County 2 on 1 December (Szymczak), Pierce County 2 on 12 January (Kieser), Walworth County 7 on 13 January (m. obs.), Rock County 24 February (Yoerger), and Winnebago County 8 on 28 February (Shillinglaw). Maximum number reported 222 in Milwaukee County 1 December (Frank), and 80 in Ozaukee County 14 February (Uttech),

Ring-necked Duck—Total of 21 individuals on 6 CBCs with maximum number of 8 on the Sheboygan CBC. Other sightings in 7 counties: Waukesha County 2 on 1 December and 1 on 8 December (Szymczak), Buffalo County 9 December (Larson), Dane County 6 on 24 December (Evanson), Walworth County 3 on 1 January (Tessen) and 2 on 6 January (Paulios), Pierce County 13 January (Jackson), Wood County 6 February (Evanson), and Rock County 24 February (Yoerger),

Greater Scaup—Total of 6169 individuals on 12 CBCs. Other sightings from 9 counties bordering Lake Michigan plus 3 inland counties: Dane County 7 on 1 December (Kamp), Winnebago County 1 throughout the month of December (Tessen), and Marinette County 2 January (Kavanagh). Maximum number in Milwaukee County 7000 on 8 December (Enernie) and 4000 on 24 January (Frank), Sheboygan County 2000 on 5 January (Kavanagh), and Ozaukee County 1500 on 12 January (Uttech).

**Lesser Scaup**—Total of 349 individuals on 10 CBCs. Other sightings from 14 counties: Manitowoc County TTP (Sontag), Dane County 1 December (Evanson), Brown County 18 on 3 December (Tessen), Waukesha County 9 on 8 December (Szymczak), Buffalo County 9 December (Larson), Green Lake County 15 on 20 December (Schultz), Racine County 25 December and 1 January (Howe, Tessen), Walworth County 6 January (Howe), Barron County 2 February (Carlsen), Kewaunee County 4 on 16 February (Mueller), and Winnebago County 28 February (Uslabar). Maximum number reported was 300 in Milwaukee County 15 December (Prestby), and 100 in Sheboygan County 14 January (Goodman).

*Eider sp.*—One female in Milwaukee County 5 January (Gustafson, Tessen). See "By the Wayside."

Harlequin Duck—One on Sheboygan CBC. Other county sightings in Pierce County 16 December (Kieser), Kewaunee County 22 December (Schilke), Sheboygan County TTP, 8 on 25 December, 5 on 26 January (Brasser, Evanson, Yoerger, Wood), and Pierce County 17 and 24 February (Kiser, Meyer).

Surf Scoter—One individual on Woodland Dunes SE CBC (Manitowoc County). Other sightings in 4 counties bordering Lake Michigan: Manitowoc County 1-28 December (Sontag), Milwaukee County 1 December-17 February (Bontly, Jackson, Petherick, Wilson), Sheboygan County 3 on 1 December and 2 on 16 January (Tessen), and Ozaukee County 13 January and 23 February (Wood, Tessen).

White-winged Scoter—Total of 5 individuals on 3 CBCs: Milwaukee 1, Sturgeon Bay 1, Washington Island 3. All other sightings from 5 counties bordering Lake Michigan: Milwaukee County 1 December (Wilson), 5 on 9 December (Szymczak), 7 on 13 January (Bontly), 23 February (Wood), 7 on 29 February (Prestby), Ozaukee County 7 at Harrington Beach BOP (Uttech), 1 male on 13 January (Wood), 23 February (Tessen), Port Washington 25 February (Uttech), Racine County 7 at Racine Harbor 22 February (Fare), Sheboygan County BOP (Tessen), 1 female on 5 January at North Point (Kavanagh), 1 female 24 February (Wood), and Manitowoc County 18 February-EOP (Sontag).

**Black Scoter**—One individual reported on the Milwaukee CBC. Seven other reported sightings in 2 counties: Sheboygan County BOP (Tessen) and Milwaukee County BOP-3 February (Gustafson, Hughes, Prestby, Szymczak, Wilson, Wood).

Long-tailed Duck—Total of 5967 individuals on 5 CBCs. Reported from 5 other counties all bordering Lake Michigan: Door County TTP (Lukes), Milwaukee County 5 from Doctor's Park 13 January (Bontly), Ozaukee County TTP (Schaefer, Tessen, Uttech), Racine County 5 on 1 January (Tessen), Sheboygan County TTP (Tessen), with 1000 on 23 February (Fissel), and 500 on 24 February at Kohler-Andrae State Park (Frank).

**Bufflehead**—Reported from 16 counties including 7 counties that border Lake Michigan and 9 inland counties. Jefferson County BOP (Etter Hale), Sheboygan County TTP and 30 on 4 December (Brasser, Goodman), Door County 3 December (Tessen), Iowa County 1 at the Arena Boat Landing 4 December (Holsch-Waukesha County 15 at Oconomowoc 8 December (Szymczak), Ozaukee County 30 at Harrington Beach 9 December (Uttech), Dane County 48 from Picnic Point 15 December (Schneider), Green Lake County 22 on 20 December (Schultz), Kewaunee County 22 December (Schilke), Kenosha County 6 on 25 December (Kamp), Manitowoc County 26 December (Evanson), Racine County 99 from Wind Point 9 January (Howe), Walworth County at Lake Delavan 12 January (m. obs.). Juneau County 26 January (Brigham), and Sauk County 30 on 16 February (McDonald).

Common Goldeneye—Reported in 33 counties including these northernmost: Ashland, Bayfield, Douglas, Florence, Marinette, Oneida, and Polk. Maximum number of 2000 at Bradford Beach in Milwaukee County 24 December (Hansen), 450+ in Manitowoc County 8 January (Sontag), and 450 in Rock County 3 February (Yoerger).

Barrow's Goldeneye—Two individuals were reported from Freedom Park in Pierce County 16 December (Kieser). At least 1 of these remained until 23 January (Jackson). One individual was again found in Milwaukee County at Doctor's Park and Schlitz Audubon Center from 16–27 January by 7 observers. Two more individuals were reported from Sheboygan County by 7 observers from 8 January to 24 February documented by Wood. See "By the Wayside."

**Hooded Merganser**—Reported from 21 counties by 23 observers BOP-EOP. Maximum number of 120 on Madison CBC.

**Common Merganser**—Reported in 32 counties with maximum number of 8000 in Green Lake County 10 December (Schultz), and 5000 in Brown County 3 December (Tessen).

**Red-breasted Merganser**—Reported in 14 counties, 7 along Lake Michigan, with inland counties represented by Bayfield, Columbia, Dane, Green Lake, Marathon, Walworth, and Winnebago. Maximum number of 300 at Harrington Beach in Ozaukee County 1 December (Uttech), and 150 at Doctor's Park in Milwaukee County 16 January (Prestby).

**Ruddy Duck**—A total of 30 individuals was found on 8 CBCs with maximum number of 9 on the Madison CBC. Other reports from 5 counties that border Lake Michigan and 5 inland counties of Columbia, Dane, Green Lake, Walworth, and Waukesha.

Gray Partridge—A total of 45 individuals on 4 CBCs with maximum number of 17 from New Franken and 14 from Green Bay CBCs, both in Brown County. Other reports include a high of 18 reported from Brown County 8 December (Van Duyse), 12 in Manitowoc County 14 December (Holschbach), 9 in Sheboygan County 16 December (Cutright), 3 from Grant County 30 December (Romano), 6 in Outagamie County 16 January (Tessen), 12 in Ke-

waunee County 18 January (Schilke), and Manitowoc County 7 on 29 February (Sontag).

**Ring-necked Pheasant**—Reported in 35 counties with a maximum number of 240 on Poynette CBC.

**Ruffed Grouse**—Maximum number of 45 reported on Gilman CBC (Taylor County). Other reports in 23 counties including these southern counties: Dane, Iowa, and Richland.

**Spruce Grouse**—Total of 3 individuals on 2 CBCs, Phelps 2 and Manitowish Waters 1. No other reports were noted for the season.

**Sharp-tailed Grouse**—Total of 22 individuals was found on 4 CBCs, Gilman 3, Grantsburg 5, Holcombe 7, and Solon Springs 7. Two were reported from the Pershing Wildlife Area in Taylor County 27 February (Betchkal).

Greater Prairie-Chicken—Total of 11 individuals was found on 2 CBCs: Arpin 3 and Spencer 8. Other reports came from the Buena Vista Grasslands in Portage County where 48 were found on 9 December (Prestby), 8 individuals on 1 January (Schaufenbuel), 100 on 2 February (Keyel), and 110 on 22 February (Martin). On 30 December a flock of 40 was noted at the county lines of Marathon, Portage, and Wood Counties (Zvolanek), and 2 were reported from the Mead Wildlife Area in Marathon County 27 January (Cameron).

Wild Turkey—Reported from 23 counties with maximum numbers of 799 on the Richland Center CBC. Maximum numbers after the CBCs: 204 in Florence County 15 January (Kavanagh) and 135 in Manitowoc County 29 December (Holschbach).

**Northern Bobwhite**—A total of 30 individuals was reported on 7 CBCs with maximum number of 9 on New Franken and 8 on Sauk City CBCs. No further reports this season.

**Red-throated Loon**—Two individuals were reported from Milwaukee County 12 January (Hughes) and multiple sightings from Sheboygan County 1 December through 26 January (Jackson, Tessen, Wood).

**Pacific Loon**—Although one may have been in Sheboygan County 1 December, there was insufficient documentation to verify its presence.

**Common Loon**—A total of 8 from 3 CBCs: Cedar Grove 4, Madison 2, and Sheboygan 2. Two birds were noted in Dane County 1 December (Yoerger), and 1 individual 20 December (Evanson), Green Lake County 10 December (Schultz).

**Pied-billed Grebe**—One individual on Madison CBC and 1 during the count week on Racine CBC. Other sightings in 5 counties: BOP in Waukesha County (Gustafson), Dane County 3 from Spring Harbor Beach 6 December (Matney), and 1 from the Yahara River (Jakoubek), Pierce County 16 December from Prescott Marina (Kieser), Racine County 24 December (Howe), and Walworth County 1 and 27 January (Tessen, Jacyna).

**Horned Grebe**—Total of 5 individuals from 3 CBCs: Madison 3, Milwaukee 1, and Sauk City 1. Only other reports were 3 from Ozaukee County 1 December (Tessen, Uttech).

**Red-necked Grebe**—One individual on Lake Geneva CBC. This individual was first reported 29 December and continued until last reported 13 January Walworth County (Evanson, Jacyna, Mooney, Tessen, Wood, Yoerger).

Western Grebe—One individual on Lake Geneva CBC. Like the Red-necked Grebe this individual was first reported 29 December and continued until last reported 13 January Walworth County (Evanson, Jacyna, Mooney, Tessen, Wood, Yoerger).

American White Pelican—Total of 11 reported on Green Bay CBC (Brown County). Other sightings both from Brown County 2 on 3 December and 6 on 28 January (Tessen, Baumann).

**Double-crested Cormorant**—Total of 31 on 4 CBCs with maximum number of 21 on Green Bay CBC. Other reports from 6 counties: Brown County 25 on 3 December and 22 on 29 February (Tessen), 19 on 9 January (Kavanagh), Buffalo County 9 December (Larson), Outagamie County 12 December (Reimer), Rock County 13 January (Yoerger), Winnebago County 14 January (Uslabar), and Ozaukee County 23 and 26 February (Fissel, Uttech)

Great Blue Heron—Reported from 14 counties: Manitowoc County BOP-2 January (Sontag), St Croix County 2 on 1 December (Brue), Columbia County 18 December through 13 February (Dischler), Dane County 11 December, 5 and 28 January (Stutz, Cheney Mills), Milwaukee County 18 December and 1 January (Frank, Zehner), Racine County 19 December (Howe), Outagamie County throughout the month of December (Tessen), Ozaukee County 5 January (Kavanagh), Washington County 6 January (Frank), Rock County 21 January (Yoerger), 2 at the Arena Boat Landing in

Iowa County 2 and 8 February (Holschbach) (Roenneburg), Lulu Lake in Walworth County 3 February (Howe), Waukesha County 3 February (Szymczak), and Lafayette County 23 February (Yoerger),

**Ibis sp.**—An Ibis species was photographed by Bahls in Dodge Co 12 December. See "By the Wayside."

**Turkey Vulture**—Total of 13 birds on 2 CBCs: 4 on New Franken and 9 on Palmyra. Only other report from Ozaukee County 3 December (Uttech).

Bald Eagle—Isn't it fitting that with the recent delisting of this species from the endangered species list that it is one of the most widely reported species in Wisconsin Counties. Reported in these northern counties: Ashland, Barron, Bayfield, Burnett, Chippewa, Door, Douglas, Dunn, Eau Claire, Florence, Forest, Iron, Langlade, Marathon, Marinette, Menominee, Oconto, Oneida, Pepin, Pierce, Polk, St. Croix, Sawyer, Vilas, and Washburn. Maximum numbers of 231 on Bridgeport CBC (Grant County), 50 in Grant County 5 January (Hansen), and 31 in Pierce County 31 January (Wood).

Northern Harrier—Reported from 14 counties: Outagamie County 1 December (Tessen), Waukesha County BOP-8 December (Gustafson), Winnebago County BOP-23 December (Ziebell), Richland County 3 December (West), Ashland County 15 December (Anich), Racine County 19 December (Howe), Dodge County 12 January (Duerksen), Walworth County 13 January (Yoerger), Green County 14 January (Yoerger), Ozaukee County 25 January (Frank), 2 at Bong Recreational Area in Kenosha County 13 February (Goodman), Brown County 16 February (Mueller), Dane County 24 February (Schiffman), Door County 13 February -EOP (Lukes), and Winnebago County EOP (Uslabar).

Sharp-shinned Hawk—Reported throughout the state from 34 counties including these northernmost: Ashland, Dunn, Eau Claire, Florence, Forest, Marathon, Marinette, Oneida, Pepin, Polk, St. Croix, and Shawano.

Cooper's Hawk—Reported from 38 counties including these northernmost: Barron, Chippewa, Door, Langlade, Marathon, Marinette, Polk, Sawyer, and St. Croix.

**Northern Goshawk**—Total of 11 individuals found on 11 CBCs and on 3 other counts during the count week. Other reports in 15

counties including these southern counties: Dane, Dodge, Fond du Lac, and Marquette Counties (Betchkal, Brady, Cameron, Gustafson, Jakoubek, Kavanagh, Lukes, Prestby, Oksiuta, Richmond, Romano, Schneider, Uttech, Ziebell).

**Red-shouldered Hawk**—Total of 17 individuals found on 11 CBCs with maximum of 3 found on both Montello and Sauk City CBCs. Other sightings from 10 counties: Waupaca County 12 December (Tessen), Milwaukee County 21 December (Prestby), the Quincy Bluff Area in Adams County 29 December (Mooney), Chippewa Bottoms in Dunn County 12 January (Polk), Arena Boat Landing in Iowa County (Holschbach), St. Croix County 2 February (Persico), Waubesa Wetlands in Dane County 14 February (Yoerger), Polk County 19 February (Maercklein), Cadiz Springs in Green County 23 February (Yoerger), and Scuppernong Springs in Waukesha County 23 February (Szymczak).

**Red-tailed Hawk**—Maximum number of 118 on Mt. Horeb CBC. The uncommon rufous morph was reported in La Crosse County 17 January (Jackson). Reported in 56 counties throughout the state.

**Rough-legged Hawk**—Reported in 52 counties with maximum number of 10 near Arlington in Columbia County 29 December (Martin), 10 in Kenosha County 13 February (Freriks), and 9 in Green County 23 February (Yoerger).

Golden Eagle—Total of 13 found on 7 CBCs with maximum number of 4 on Nelson CBC (Buffalo County). Other sightings in 7 counties: Portage County 1 January (Schaufenbuel), Trempealeau County 13 January (Bibby), Iowa County 19 January (Holschbach), 2 in Buffalo County 24 January (Betchkal), Burnett County 25 January (Maercklein), Jackson County 28 January (Tessen), and Monroe County 8 December and 27 February (Epstein). The results of the Golden Eagle Survey for the Bluffs and Coulee Region of the Upper Mississippi River Watershed which includes 3 states were a total of 60 individuals (that figure includes count week individuals also). This survey encompasses 26 routes which includes 16 in Wisconsin. From these 16 routes, Wisconsin had 31 individuals on the count day of 19 January.

**American Kestrel**—Reported in 42 counties including these northernmost: Barron, Door, Langlade, Marinette, Polk, Shawano, and St. Croix.

**Merlin**—Total of 7 individuals found on 7 CBCs. Other reports in 5 counties: Door County BOP-EOP (Lukes), Florence County 7 December (Kavanagh), Chippewa County 21 December (Polk), Sauk County 31 December (Yoerger), Winnebago County 9 January (Tessen), and Douglas County 15 February (Schiffman).

Gyrfalcon—No reports this season.

Peregrine Falcon—Total of 7 found on 7 CBCs. Other reports from 9 counties: Manitowoc County TTP (Sontag), Sheboygan County TTP (Brassers), Dane County 10 December (Schwarz), Milwaukee County 1 December (Casper), Racine County 1 January (Gustafson), Brown County 28 January and 8 February (Baumann, Paulios), Waukesha County 15 February (Boldt), and Winnebago County 5 December and 24 January-EOP (Uslabar, Bruce).

*Virginia Rail*—Total of 8 individuals found on 2 CBCs: Madison 4 and Poynette 4. No further reports this season.

American Coot—Reported in 16 counties with maximum number of 1178 on Madison CBC and 900 on Lake Geneva in Walworth County 6 January (Howe).

**Sandhill Crane**—Found on just 1 CBC, Montello (Marquette County) and 1 during the count week at Woodland Dunes SE CBC (Manitowoc County). Other reports from 6 counties: Waukesha County BOP-3 December (Gustafson), Ozaukee County 3 December (Uttech), Iowa County 10 at the Arena Boat Landing 4 December (Holschbach), Dane County 3 on 5 December (Jakoubek), Walworth County 19 and 26 January (Jacyna), and Columbia County 16 February (Polk). With the deep snow cover throughout the state perhaps the only wintering individuals were the January birds found in Walworth County.

Killdeer—No birds were found on CBCs, however 2 individuals were found during the count week on Kenosha and Racine CBCs. Other reports from 3 counties: the Mazomanie Wildlife Area in Dane County 1 December (Schneider), Manitowoc County 5 December (Holschbach), and Racine County 25 and 30 December (Howe, Fare).

**Spotted Sandpiper**—The individual found by Fare on 9 December in Racine County was last reported on 22 December (Fare, Howe) on the Racine CBC. See "By the Wayside."

**Sanderling**—One bird was reported in Sheboygan County 1 December (Tessen).

**Purple Sandpiper**—One found on Racine CBC 22 December. This individual was last seen on 31 December (David, Dixon, Fare, Howe, Keyel, Wood). See "By the Wayside."

**Dunlin**—One found on Racine CBC 22 December (Fare). This bird was last seen on 31 December (David, Fare). See "By the Wayside."

Wilson's Snipe—Reported in 9 counties: 5 BOP and 2 EOP in Outagamie County (Tessen), 2 in La Crosse County 8 December, Burnett County 21 December (Maercklein), at Sheridan Park in Milwaukee County 23 December (Szymczak), 2 at Tri Creek Dam in Monroe County 27 December (Epstein), at Paradise Spring in Waukesha County 30 December (Szymczak), Columbia County 31 December (Dischler), Green County 14 January (Yoerger), and Bayfield County 30 and 31 January (Brady, Bratley).

**Bonaparte's Gull**—One reported from Milwaukee County BOP-4 December (Gustafson).

**Ring-billed Gull**—Reported in 19 counties with maximum of 4000–5000 in Brown County 3 December (Tessen).

**Herring Gull**—Reported in 25 counties with maximum of 4000–5000 in Brown County 3 December (Tessen).

**Thayer's Gull**—Total of 5 individuals reported on 4 CBCs: Appleton 2, Milwaukee 1, Montello 1, Sauk City 1. Two other counts recorded count week individuals: Herbster and Racine CBCs. Other reports from 12 counties: Dane County 1 December (Prestby), at the Arena Boat Landing in Iowa County 3 December (Thiessen), Sauk County 1, 3, and 31 December (Romano, Prestby, Yoerger), Outagamie County 10 December (Tessen), Marquette County 15 December (Christensen), Green Lake County 20 December (Schultz), Douglas County at Superior Landfill 1 on 6, 7 on 21, and 1 on 31 December, 3 on 4 February, (Anich, Bardon, Hendrickson, Wood), Milwaukee County 7 on 26 December, (Prestby), Racine County 1 January (Tessen), Sheboygan County 16 December and TTP (Prestby, Tessen), Kewaunee County 16 February (Mueller), 2 at Port Washington in Ozaukee County 24 February (Frank), Milwaukee County 2 on 28 February (Prestby), and Douglas County 3 on 29 February (Svingen).

Iceland Gull—Total of 2 individuals found on 2 CBCs: Milwaukee and Montello. A count week bird was reported from Racine CBC. Other reports from 5 counties: at the Superior Landfill in Douglas County 1 on 6, 3 on 21, and 2 on 31 December (Hendrickson, Bardon, Anich), Racine County 24 December, 13, and 29 January, 3 February (Bontly, Lubahn, Gustafson, Jackson, Prestby), Winnebago County 16 February (Tessen), Sheboygan County 23 and 24 February (Brassers, Tessen), and Douglas County 2 on 4 February and 1 on 29 February (Wood, Svingen)

**Thayer's/Iceland Gull**—One individual from Cornucopia in Bayfield County 29 December and in Douglas County 3 January (Anich).

Lesser Black-backed Gull-Total of 3 individuals found on 2 CBCs: Appleton and Sauk City CBCs. A count week bird was reported from Racine CBC. Other reports from 8 counties: Dane County 1 December (Prestby, Stutz), Outagamie County 18 December (Tessen), Racine County 12 and 23 December, 2 birds on 1 January (Gustafson, Howe, Jarvis, Keyel, Wood), Milwaukee County 30 December, 5 and 31 January, and 23 February (Lubahn, Gustafson, Szymczak, Wood), Sauk County 1, 3, and 31 December, and 1 January (Pope, Prestby, Romano, Thiessen, Yoerger), Walworth County 1 January (Jacyna), Sheboygan County 10 January (Frank), and Winnebago County 20 January—EOP (Bruce).

**Slaty-backed Gull**—For the 2<sup>nd</sup> consecutive year this rare gull species was reported in the state. This year an individual was seen at the Superior Landfill in Douglas County from 21 December–8 February (Bardon, Prestby, Svingen, Wood).

Glaucous Gull—Total of 28 individuals reported on 10 CBCs with maximum number of 10 on Sheboygan CBC. Other reports from 12 counties: Dane County 1 December (Prestby, Stutz), Green Lake County 3 on 4 December (Schultz), Outagamie County 10 December (Tessen), at the De Pere Dam in Brown County 15 December (Mead), Kewaunee County 8 on 27 December, 2 on 12 January, and 1 on 16 February (Schilke, Baumann, Mueller), Milwaukee County 30 December and 2 on 5 January (Lubahn, Kavanagh), Sauk County 31 December (Yoerger), Door County 9 February (Lukes), Ozaukee County 12 February (Uttech), Sheboygan County 10 on 1 December and 5 on 26 December, 3 on 5 January and 5 on 13 January, and 2 on 23 February (Tessen, Larson, Frank), Douglas County 10 on 3 January,

15 on 2 February, 9 on 9 February, and 17 on 29 February (Anich, Svingen, Wood), and Winnebago County TTP (Ziebell).

Great Black-backed Gull—Total of 19 individuals reported from 8 CBCs with maximum number of 8 on Sheboygan CBC. Other reports from 12 counties: Sheboygan County 20 on 1 December and 6 on 26 December (Tessen, Larson), Green Lake County 5 and 20 December (Schultz), Racine County 12 and 24 December (Fare, Howe), Marquette County 15 December (Christensen), Milwaukee County 15 December (Prestby), Outagamie County 15 December (Tessen), Winnebago County 15 December (Ziebell), Manitowoc County 25 December (Schilke) and 16 on 12 January (Baumann), 10 in Kewaunee County 27 December (Schilke), Ozaukee County 3 January (Tessen), Door County 10 January (Lukes), Sheboygan County 5 on 3 February (Cutright) and 6 on 9 February (Yoerger), Ozaukee County 2 from Port Washington 26 February (Uttech), and Douglas County 28 December and 29 February (Svingen).

**Rock Pigeon**—Reported in 62 counties with maximum number of 1155 from Richland Center CBC.

Eurasian Collared-Dove—A total of 16 individuals found on 2 CBCs: 7 in Bridgeport (Grant County) and 9 in Hales Corners (Milwaukee County). All other sightings from Milwaukee County: 2 on 18 January (Wood), 26 January (Jackson), and 31 January (Gustafson). On 1 December Jackson witnessed this species taken by a Cooper's Hawk in Milwaukee County.

**Mourning Dove**—Reported in 63 counties with maximum number of 1913 on Appleton CBC.

White-winged Dove—An individual first reported in the fall season lingered until last reported 31 December (Lukes, Shumway, Tessen). See "By the Wayside."

Eastern Screech-Owl—Reported in 18 counties with maximum number of 31 on Madison CBC. Found in these northern counties, Door, Dunn, Polk, Washburn, and Waushara (Lukes, Campbell, Pollock, Dunsmoor, Tessen).

*Great Horned Owl*—Reported in 34 counties with maximum number of 55 on Riveredge CBC.

**Snowy Owl**—Two individuals reported on the New Franken CBC and 1 found during the count week on Racine CBC. Other sightings from 10 counties: Shawano County 12 December (Koonz), Kenosha County 17 December, Outagamie County 15 December and 24 February (Motquin, Martin), Ozaukee County 5 January (Yoerger), Dane County 8 January and 5 February (Zielinski), Kewaunee County 12 January (Baumann), Milwaukee County 20 and 24 January and 3, 23, and 28 February (Frank, Johnson, Prestby, Sigler), Portage County 5, 19, 25, 26, and 28 January and 23 February (Foret, Janz, Keyel, Wood, Jackson, Fisher), and Brown County 24 February (Grant, Schilke).

**Barred Owl**—Reported in 27 counties with maximum number of 12 on Riveredge CBC.

*Great Gray Owl*—One individual photographed from Iron County 18 and 19 December (Brandt, Bacon).

Long-eared Owl—10 individuals reported on 7 CBCs: Baraboo 1, Cassville 2, Green Lake 1, Madison 1, Milwaukee 2, Richland Center 2, and Trempealeau 1. Reported as count week birds on 2 CBCs: Riveredge and Woodland Dunes SE. Other reports from 4 counties: Door County 9 December (Lukes), Manitowoc County 25 December (Darcy V), Brown County 27 December (Klosiewski), and Sauk County 23 February (Romano).

**Short-eared Owl**—5 individuals on 3 CBCs: Baraboo 1, Horicon Marsh 2, and Shawano 2. Later reports from 2 counties: Dane County 30 January (Riggle) and Bayfield County 11 February.

**Boreal Owl**—One individual photographed at Ryan Brady's home in Bayfield County 9 February (Brady, Oksuita).

Northern Saw-whet Owl—A total of 13 individuals from 9 CBCs. Later reports from 4 counties: Dane County 3 January (Herb), Sauk County 28 January (Carbon), Apostle Islands in Bayfield County 13 February, and Waukesha County 22 February (Gustafson).

**Rufous Hummingbird**—One individual from Eau Claire County 5 December (Betchkal).

**Belted Kingfisher**—Reported in 26 counties with these northern counties reporting: Brown, Florence, Marathon, Oconto, St. Croix, and Wood (Baumann, Kavanagh, Persico).

**Red-headed Woodpecker**—Reported from 13 counties: Waushara County 20 December (Tessen), Columbia County 21 December (Doverspike), Juneau County 16 December, 28 January, and 3 February (Hamon, Tessen, Swig-

gum), Rock County 24 December (Yoerger), the Quincy Bluff area in Adams County 29 December (Mooney), Lafayette County 25 December and 3 February (Romano, Fissel), Richland County 1 January (Frank), Buffalo County 4 January (Cameron), Jackson County 24 January (Bibby), Portage County 28 January (Schaufenbuel), Washburn County 2 February (Haseleu), and Monroe County 20 February (Epstein).

**Red-bellied Woodpecker**—This species continues the trend of northward expansion in the state with 62 of the 72 counties in Wisconsin reporting. Found in these northern counties: Barron, Burnett, Florence, Forest, Marinette, Oconto, Polk, Rusk, Sawyer, Shawano, Taylor, and Washburn.

Yellow-bellied Sapsucker—Reported in 11 counties: Columbia County 1 December–19 January (Dischler), Green Lake County 11 December–29 February (Schultz), Milwaukee County 15 and 20 December (Bontly, Zehner), Racine County 18 December (Kennedy), Jefferson County 22 December (Etter Hale), Winnebago County 23 December (Harriman), Dane County 25 December (Feist), Paradiss Spring in Waukesha County 6 January (Szymczak), Marathon County 21 January (Evanson), Walworth County 21 January (Fitzgerald), La Crosse County 23 January (Jackson), and Rock County 7 February (Yoerger).

**Downy Woodpecker**—Reported in 65 counties with 254 maximum number on Mt. Horeb CBC.

**Hairy Woodpecker**—Reported in 66 counties. Maximum number of 95 on Riveredge CBC.

Black-backed Woodpecker—Two individuals reported on Summit Lake CBC (Langlade County). Other reports from Forest County 10 January–23 February (Kavanagh, Kreitinger, Martin, Paulios, Peczynski, Richmond, Romano), Outagamie County 24 February (Motquin), and St. Croix County 24 February (Persico).

**Northern Flicker**—Reported in 33 counties with maximum number of 3 in Kenosha County 13 February (Freriks). Reports from these northern counties: Door, Eau Claire, Marinette, Pierce, Shawano, and St. Croix.

**Pileated Woodpecker**—Reported in 47 counties with a maximum number of 4 in Portage County (Hall).

**Eastern Phoebe**—One individual reported on Poynette CBC. No reports after the CBCs.

**Northern Shrike**—Reported in 59 counties with a maximum of 22 on Spencer CBC (Clark and Marathon Counties). In 2006 winter reports came from just 26 counties.

Gray Jay—Total of 46 individuals reported on 10 CBCs with maximum number of 9 on Phelps CBC (Vilas County). Other reports from 8 counties: Forest County 4 on 8 December, Oneida County 8 December and 15 January (Yoerger, Tessen), Vilas County 9 December (Prestby), Iron County 14 December (Brandt), 4 in Florence County 18 December (Kavanagh), 15 January, 2 on 16 January, 2 on 28 January, 4 on 17 February (Prestby, Kavanagh, Romano), Lincoln County 2 on 27 December (Uttech), Ashland County 5 February (Bruhnke), and Bayfield County 9 February (Oksiuta).

**Blue Jay**—Reported in 68 counties with maximum number of 556 on Richland Center CBC. Not reported from these 4 counties: Clark, Lincoln, Pierce, and Price.

American Crow—Reported in 70 counties with maximum number of 2000 in Richland County 12 January (Swiggum). Not reported from Clark or Price Counties.

Common Raven—Maximum number of 115 on Gurney CBC (Ashland and Iron Counties). Other reports in 38 counties including these southernmost: Adams, Columbia, Iowa, Jefferson, Juneau, Monroe, Sauk, and Waushara.

**Horned Lark**—Reported in 38 counties with maximum number of 100 in both Columbia and Outagamie Counties 2 December and 24 February (McLeod, Martin).

**Black-capped Chickadee**—Reported in 69 counties with maximum number of 998 on Riveredge CBC. Not reported from Clark, Pierce, and Price Counties.

**Boreal Chickadee**—Total of 6 individuals found on 5 CBCs: Cable 1, Clam Lake 1, Phelps 2, Rhinelander 1, and Three Lakes 1. Other reports from 3 counties: Oneida County 8 December (Yoerger), Florence County 2 on 11 January (Kavanagh), and Forest County 2 on 8, 9, and 15 December, 2 on 27 January and 17 February, and 4 on 23 February (Kavanagh, Kreitinger, Martin, Prestby, Tessen).

**Tufted Titmouse**—Reported in 25 counties with maximum number of 121 on Mt. Horeb CBC. Found in these northern counties: Barron, Dunn, Chippewa, Eau Claire, and Marathon.

**Red-breasted Nuthatch**—Reported in 59 counties with maximum number of 18 in St. Croix County 2 February (Persico). Reports from northern counties were fewer than in recent years due to the poor cone crop, but more widespread in central and southern counties.

White-breasted Nuthatch—Reported in 68 counties with maximum number of 255 on Riveredge CBC. Not reported from these 4 counties: Clark, Lincoln, Pierce, and Price.

**Brown Creeper**—Reported in 26 counties with maximum number of 40 on Madison CBC. Reported from these northern counties: Chippewa, Door, Eau Claire, Florence, Forest, Iron, and Vilas.

Carolina Wren—Total of 19 individuals from 13 CBCs with maximum number of 4 from Madison CBC. Other reports from 9 counties: La Crosse County 3 on 20 December, 2 on 27 December, and 29 January (Jackson, Mitchell, Wiegel), Green Lake County 4 December and 2 on 20 December (Schultz), Columbia County 11 December-15 February (Schwalbe), Dane County 2 on 3 December and 15 December, 25 January, and 16 February (Feist, Evanson, Tessen), Jefferson County 15 December and 27 January-2 February (Etter Hale), Grant County 2 on 18 December (Romano), Marquette County 19 December and 29 January (Whitrock), Iowa County 1 January (Batchelor), and Milwaukee County 5 January-17 February (Bontly, Casper, Gustafson, Mooney, Petherick, Wilson, Wood).

Winter Wren—Total of 14 individuals from 8 CBCs with maximum number of 4 on Cassville CBC (Grant County). Other reports in 5 counties: Grant County 18 December (Romano), Polk County 2 January (Maercklein), at Tower Hill State Park in Iowa County 5 January (Kreitinger), at Retzer Nature Center in Waukesha County 2 February (Szymczak), and at Riverside Park in Milwaukee County 28 and 29 February (Vargo, Casper).

Golden-crowned Kinglet—Reported in 24 CBCs with maximum number of 10 on Burlington CBC. Other reports from 10 counties: Winnebago County BOP-15 December (Ziebell), Door County BOP-22 December (Lukes), Manitowoc County BOP-14 January (Sontag), Eau Claire County 2 December (Walton), Walworth County 5 December (Jacyna), Milwaukee County 6 December (Bontly), Jefferson County 19 December, Burnett County 21 December (Maercklein), Dane County 31 December (Paulios), and Waukesha County 1 January (Szymczak).



Figure 2. Varied Thrush in Marathon County on 30 December 2007 by Mary Backus.

**Ruby-crowned Kinglet**—One individual reported from Vulture Hollow in Iowa County 8 December (Roenneburg).

**Eastern Bluebird**—Reported in 30 counties with maximum number of 81 on Sauk City CBC.

Townsend's Solitaire—A record number of 7 individuals reported from 7 CBCs: Burlington, Ephraim, Green Lake, Kewaunee, La Crosse, Poynette, and Wausau. Other reports from 8 counties: Sauk County 1 December (Prestby, Stutz), Door County 6 December-14 February (Kile, Lukes), Marathon County 15 December-2 January (Backus, Belter, Tessen), Calumet County 25 December (Reimer), La Crosse County 25 December and 4 January (Jackson), St Norbert Abbey in Brown County 29 December and 2-20 February (Mueller, Schilke, Van Duyse), Columbia County 27 and 28 January (Fissel, Luthin), and at Kohler-Andrae State Park in Sheboygan County 1 January-15 February (Bontly, Christensen, Frank, Hansen, Goodman, Johnson, Mooney, Schaefer, Sigler, Szymczak).

Hermit Thrush—Total of 10 individuals from 7 CBCs: Hustisford 1, La Crosse 1, Madison 1, Milwaukee 3, Riveredge 2, Washington Island 1, and Waukesha 1. Other reports from 3 counties: Dane County 9–11 December (Fissel, Stutz), Brown Deer Park in Milwaukee County 2 on 27 January (Huf), and Ozaukee County 3 February (Szymczak).

American Robin—Maximum number of 694 on Hudson CBC (St. Croix County). Other reports from 37 counties including these northernmost: Barron, Bayfield, Chippewa, Eau Claire, Florence, Forest, Marathon, Polk, and St. Croix.

Varied Thrush—Reported in 5 counties: Door County 2 December (Phillips), Waupaca County 7–10 December (Schroeder), Bayfield County 19 December and 1 January (Brady), Dunn County 28 December (Betchkal, Maves), and Marathon County (Fig. 2) 22 December–20 February (Backus, Belter, Goltz).

*Gray Catbird*—One individual in Milwaukee County 6 December (Cowart).



Figure 3. Northern Mockingbird in Franksville, Racine County, on 9 February 2008 was photographed by Jerry DeBoer.

Northern Mockingbird—One individual reported on Milwaukee CBC and 1 found on Chippewa Falls CBC during the count week. Other reports from Waushara County 3 February (Cieszynski) and Racine County documented by photograph (Fig. 3) 9 February (DeBoer).

**Brown Thrasher**—One individual reported on Shawano CBC (Fig. 4) and 1 found during the count week on Stevens Point CBC (Portage County). Other reports from Forest County 8 December (Prestby, Yoerger).

**European Starling**—Reported from 61 counties with maximum number of 5000 at the Germantown Landfill in Washington County 4 January (Frank).

American Pipit—Total of 3 individuals reported from Racine CBC. Other reports from 4 counties: Manitowoc County BOP-12 December (Sontag), Dane County 2 December (Martin), Racine County 1 on 6 December, 3 on 22 December, and 1 on 2 January (Howe, Fare), and Milwaukee County 24 December.

Bohemian Waxwing—Total of 655 individuals on 14 CBCs with maximum number of 190 on Bayfield CBC and 177 on Medford CBC (Taylor County). Two more counts, Sturgeon Bay and Wausau, recorded count week birds. Other reports from 16 counties all from the northern third of the state with the exception of these 4 central counties: Marathon County 6 December and 2 January (Backus, Tessen), Jackson County 26 December (Paulios), Brown County 6 January (Van Duyse), and Portage County 23 January (Schaufenbuel). Maximum number of 350 individuals 18 February in Oneida County (Richmond).

Cedar Waxwing—Reported from 27 counties with maximum number of 55 from Manitowoc County 27 December–7 February (Holschbach). Reported from these northern counties: Brown, Door, Kewaunee, Marathon, Marinette, Polk, and St. Croix.

**Yellow-rumped Warbler**—Total of 7 individuals on 3 CBCs with maximum number of 5 on Milwaukee CBC. Other reports from 8 counties: Milwaukee County 2 December (Szym-



Figure 4. Brown Thrasher that arrived in October 2007 and departed in April 2008 in Shawano, Shawano County, was documented by Ron and Lynn Ackley.

czak), Fond du Lac 5–30 December (Kenyon-Cler), Columbia County 8 December (Barrientos), Racine County 11 December (Howe), Ozaukee County 15 December (Frank), Monroe County 25 December–13 January and 2 February (Lichter), Kenosha County 7 on 24 February (Jacyna), and Manitowoc County 13 and 14 February then 21 February-EOP (Ozarowicz, Sontag).

**Townsend's Warbler**—Only the 2<sup>nd</sup> Winter Season and 3<sup>rd</sup> all time record for the state. One individual photographed on Ft. Atkinson CBC 22 December (Wanie).

Eastern Towhee—Total of 6 individuals on 5 CBCs: Bridgeport 1, Cooksville,1 Green Lake 1, La Crosse 1, and La Farge 2, with 1 more count week bird on Milwaukee CBC. Other reports from Milwaukee County 1 December–8 January (Zehner) and Washburn County 7 December (Dunsmoor).

American Tree Sparrow—Reported in 53 counties with maximum number of 1359 on Ft. Atkinson CBC. Reported from these northern counties: Ashland, Bayfield, Chippewa, Florence, Langlade, Marinette, Menominee, Polk, Rusk, St. Croix, and Taylor.

**Chipping Sparrow**—Total of 6 individuals from 5 CBCs: Appleton 1, Baraboo 1, New Franken 2, Platteville 1, and Stevens Point 1. No other reports this season.

**Field Sparrow**—One individual reported during the count week on Hartford CBC (Dodge and Washington Counties). No other reports this season.

**Savannah Sparrow**—One individual reported on Burlington CBC (Kenosha and Racine Counties). One other report from Racine County 19 December (Howe).

Fox Sparrow—Total of 39 individuals on 14 CBCs with maximum number of 10 on Madison CBC. Trempealeau CBC had a count week bird. Other reports from 6 counties: Dane County 2 on 1 December, 1 on 3 and 11 December, then 4 on 5 and 25 January in the UW Madison Arboretum (Evanson, Feist, Herb, Kamp, Stutz), Columbia County 5 December—28 January (Dischler), Grant County 31 December (Hunter), Kenosha County 24 February (Jacyna), and 5 in Outagamie County TTP (Tessen).

**Song Sparrow**—Reported from 18 counties other than the CBCs with maximum number of 25 on New Franken CBC. Found in these northernmost counties: Manitowoc County

BOP-EOP (Sontag), Marathon County, Waushara County 1–31 December (Tessen), Winnebago County 23 December (Harriman), and Brown County 9 January (Kavanagh).

Swamp Sparrow—Total of 47 individuals found on 12 CBCs with maximum number of 9 on Madison CBC. Other reports from 5 counties: at Arena Boat Landing in Iowa County 9 and 15 December (Holschbach), Walworth County 19 December (Fitzgerald), Racine County 9 February (DeBoer), Waukesha County 27 January and TTP (Gustafson, Szymczak), and Milwaukee County TTP (Gustafson).

White-throated Sparrow—Reported in 15 counties with maximum number of 6 in Dane County 6 January (Jakoubek) and 4–6 TTP Outagamie County (Tessen). Reported from these northern counties: Bayfield, Brown, Waupaca, and Washburn (Brady, Kavanagh, Tessen, Haseleu).

*Harris's Sparrow*—Two individuals on 2 CBCs: Kenosha and Milwaukee. No further reports this season.

White-crowned Sparrow—Total of 23 individuals on 9 CBCs: Beloit 2, Columbus 1, Green Bay 1, Lake Geneva 1, Medford 1, New Franken 10, Palmyra 2, Racine 3, and Riveredge 1. Other reports in 8 counties: Manitowoc County BOP-8 December (Sontag), Walworth County 5 and 30 December and 19 February (Yoerger, Jacyna), Iowa County 15 December-EOP (Roethe), Dane County 23 December and 5 January (Klubertanz, Paulios), Ozaukee County 30 December (Uttech), Racine County 1 January and 9 February (Tessen, DeBoer), Bayfield County 3 January (Brady), and Bay Beach Wildlife Center in Brown County 5 January (Kavanagh).

Dark-eyed Junco—Reported in 58 counties with maximum number of 2219 on Richland Center CBC. Found in these northern counties: Ashland, Bayfield, Burnett, Chippewa, Douglas, Dunn, Florence, Forest, Langlade, Marathon, Marinette, Menominee, Oconto, Polk, St. Croix, and Sawyer.

**Lapland Longspur**—Total of 216 individuals reported on 12 CBCs with maximum number of 80 on Oshkosh CBC (Winnebago County). Other reports from 14 more southern counties with the exception of Kewaunee, Outagamie, Waushara, and Winnebago.

**Snow Bunting**—Reported in 50 counties with maximum number of 2014 on Appleton CBC. Other high totals include 1000 on 20 December in Barron County (Carlsen) and 1000

on 28 January in Portage County (Tessen). Found in these northern counties: Ashland, Bayfield, Chippewa, Dunn, Eau Claire, Florence, Forest, Langlade, Marinette, Polk, Shawano, St. Croix, and Taylor.

**Northern Cardinal**—Reported in 66 counties with maximum number of 733 reported on Richland Center CBC. Not reported from these 6 counties: Burnett, Iron, Lincoln, Pierce, Price, and Portage.

**Rose-breasted Grosbeak**—One individual found during the count week on Kenosha CBC. Reports from 3 other counties: Ashland County BOP-3 December (Hines), Iron County documented with a photograph 16–30 December (Fauerbach, Brady), and Racine County 10 December (McFall).

Red-winged Blackbird—Reported in 17 counties with maximum number of 45 in Dane County 5 January (Paulios). Found in these northern counties: Brown, Door, Florence, Forest, and Manitowoc. There were 11 December records throughout the month, 3 reports during the month of January, and only 3 reports from February: Columbia County 13 December-EOP (Dischler), Iowa County 8 on 2 February (Holschbach), and Waukesha County 26 December-22 February (Gustafson). There seems to be no evidence of large movements of southern migrants entering the state by the end of the period.

Eastern Meadowlark—Total of 9 individuals reported on 3 CBCs: Beloit 1, Cassville 7, and Riveredge 1. An additional count week bird was found on the Arpin CBC (Wood County). Other reports from Door County TTP (Lukes) and Manitowoc County 31 December (Holschbach).

**Meadowlark sp.**—Total of 5 individuals on 4 CBCs: Palmyra 1, Sturgeon Bay 1, Waukesha 1, and Woodland Dunes NE 2.

**Rusty Blackbird**—Total of 9 individuals on 6 CBCs: Ashland 1, Bridgeport 3, Burlington, 1, Palmyra 1, Pardeeville 2, and Shiocton 1. Other reports from Outagamie County 14 December (Tessen), Iowa County 15 December EOP (Roethe), Bayfield County 16 December (Anich), Paradise Spring in Waukesha County 30 December (Szymczak), and Chippewa County 23 February (Polk).

**Brewer's Blackbird**—One individual reported on New Richmond CBC (St. Croix County). No other reports this season.

Common Grackle—Reported from 7 counties: Marquette County 1 December (Christensen), Door County 2 December (Phillips), Green Lake County 3 December (Schultz), Dane County 8 December (McDowell), Florence County 11 December (Kavanagh), Marathon County, and Ashland County 9 January (Brady).

Brown-headed Cowbird—Reported from 7 counties: Lafayette County 16 December (Romano), Walworth County 29 December and 1 January (Jacyna, Meisberger), Marathon County, Rock County 6 January (Yoerger), Waukesha County 8 on 13–15 January (Diehl), Monroe County 7 February (Epstein), and Iowa County 29 February (Romano).

**Baltimore Oriole**—Reported in Door County BOP-15 December (Lukes).

**Pine Grosbeak**—Reported in 23 counties with maximum number of 100 in Oneida County 1 December (Richmond). Found in these more southern counties: Juneau, Kewaunee, and Manitowoc.

**Purple Finch**—Reported in 38 counties with maximum number of 68 in Sauk County 23 January (Romano). Although found in fewer numbers than in recent years in the northern portion of the state, these northern counties reported: Douglas, Dunn, Eau Claire, Florence, Forest, Marathon, Marinette, Oconto, and St. Croix.

House Finch—Reported in 53 counties with maximum number of 639 on Madison CBC. Reported from these northern counties: Ashland, Bayfield, Forest, Marinette, Oneida, Polk, and Sawyer.

**Red Crossbill**—Total of 61 individuals on 3 CBCs: Nelson 13, Rhinelander 15, and Stevens Point 33. Other reports from Marinette County 5 on 4 December (Kavanagh), Florence County 16 on 17 December (Kavanagh), and Kewaunee County 20 on 21 December (Schilke).

White-winged Crossbill—Total of 15 individuals on 2 CBCs: Lakewood 7 and Shawano 8. Other reports from 4 counties: 6 in Marathon County 22 January (Belter), Forest County 2 on 28 January and 17 February (Kavanagh), Iron County 9 on 9 February (Holschbach), and Bayfield County 4 on 23 February (Oksiuta).

**Common Redpoll**—Reported from 48 counties with maximum number of 58 in Florence County 23 December (Kavanagh). Reports represented the northern and southern



Figure 5. A Hoary Redpoll on the feeder in Mercer, Iron County, of Bruce Bacon on 16 December 2007.

thirds of the state, but few came from the west central portion.

Hoary Redpoll—Total of 5 individuals reported on 4 CBCs: Antigo 2, Caroline 1, Ephraim 1, and Lakewood 1. Other reports from 6 counties: Florence County 1 December and 14 and 15 January (Kavanagh, Romano), Door County 3 December (Tessen), Iron County (Fig. 5) 16 December (Bacon), Outagamie County 1 January—29 February (Tessen), Ozaukee County 12 January—3 February (Cutright, Gustafson, Hansen, Frank, Huf), and Washburn County 28 February (Haseleu). See "By the Wayside."

*Pine Siskin*—Reported in 32 counties with maximum number of 27 in La Crosse County 1 February (Thometz). Again, because of the reduced cone crop, this species was less numerous in the northern portion of the state. Most reports came from the southern third of the state with these northern counties reporting: Barron, Chippewa, Door, Douglas, Eau Claire, Florence, Marathon, Oconto, Polk, Rusk, Sawyer, and St. Croix.

American Goldfinch—Reported in 65 counties with maximum number of 160+ in

Manitowoc County 13 February (Sontag). Due to the poor cone crop, numbers of this species were quite low in the northern portion of the state. Shumway noted none of these species were seen this season in Door County. Not reported in these counties: Buffalo, Clark, Iron, Lincoln, Pierce, Price, and Waushara.

Evening Grosbeak—Reported in 9 counties concentrated in the northeastern portion of the state with the exception of Bayfield County in the far north. Langlade County 50 on 8 December (Prestby), Menominee County 50 on 8 December and 30 on 2 January (Prestby, Tessen), Marinette County 20 on 13 December (Kavanagh), Oconto County 2 on 29 December (Kavanagh), Forest County 60 on 16 January (Kavanagh, Romano), Navarino Wildlife Area in Shawano County 25 on 18 January (Schiffman), Bayfield County 30 on 3 February and 24 on 24 February (Brady), and Lincoln County 6 on 22 February (Martin). Maximum number of 80 in Florence County 18 December (Kavanagh).

House Sparrow—Reported in 62 counties with maximum number of 2370 in Randolph CBC. Reported in these northern counties: Ash-

land, Bayfield, Douglas, Florence, Forest, Langlade, Marinette, Oneida, Polk, and Vilas.

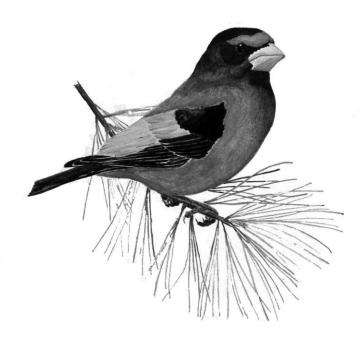
#### **STATISTICS**

With the ease of electronic reporting on ebird, and the numerous postings on Wisbird, coverage of the bird observations for the Winter Season of 2007–2008 has increased dramatically. Total of all people who contributed reports was 265, which more than doubled the observers that reported in the Winter Season Report of 2006–2007. Sixty seven people contributed Single County, Multi-County Field Forms, Rare Bird Report Forms, or photos representing a total of 50 counties. Five or more reporters submitted reports for each of 35 counties which represents an increase of over 250% from last year's reports. A total of 59 of the 72 Wisconsin counties had at least 4 or more reporters, with only 2 counties, Clark and Green Lake, represented by just 1 reporter. Only Price County was not represented by any reports. Just a reminder to include your name, address, and county on your forms. One Single County Field Form was submitted without a name or county so could not be included in the results. Several notable observations on this form were Glaucous Gull, Pine Grosbeak, and Red Crossbill.

#### **CONTRIBUTORS**

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Evening Grosbeak by Tom Sykes

### "By the Wayside"—Winter 2007–2008

Some of the species documented this season as rare or uncommon include Eider sp., Barrow's Goldeneye, Ibis sp., Purple Sandpiper, Dunlin, White-winged Dove, Great Gray Owl, Boreal Owl, Townsend's Solitaire, Yellow-rumped Warbler, and Hoary Redpoll.

#### **EIDER SP.** (Somateria)

5 January 2008, Bradford Beach, Milwaukee County-After a long search for an eider reported in a large raft of diving ducks, I finally was able to pick out a large, light brown duck. It was distinctly larger than all the Greater and Common Goldeneye around it. It was at least as large as White-winged Scoters, also in that raft. The color, however, was much paler brown than either the female/juvenile White-winged and Black Scoters present. At a distance, it appeared uniform tan or pale brown in color, with a dark bill. It looked heavy bodied, and rode low in the water. Upon diving, the briefly exposed wings showed no white, only a fairly uniform brown, a little darker than body color. Due to the distance, and length of observation, it was not possible to determine which Eider species this was (not Steller's—too small; not Spectacled no "goggle" area on head).—Dennis Gustafson, Muskego, WI.

## BARROW'S GOLDENEYE (Bucephala islandica)

13 January 2008, Prescott Marina, Pierce County—The bird was an adult Barrow's Goldeneye. It was a medium sized diver duck with a dark (purplish) head, a black back and tail, and a white chest, belly, and flanks. The bird had a white crescent shaped mark on the head between the bill and the eye. The top end of the crescent was pointed and the lower end was thicker and rounded (like an upside down comma). The bird's bill was black and its eyes were bright yellow.

The upper breast and sides of the bird were white. When it was swimming, this created a 2 inch tall white section that extended from the bird's chest back to its legs. At the front of the wing, the solid white side was broken with a black vertical mark that extended toward the waterline from the black back. This mark did not extend all of the way to the water line. When viewed from the side, there were a series of white hash marks on the black back/wings above the margin where

the black back met the white sides. These marks were at about a 45 degree angle pointed toward the head of the bird and started at the leading edge of the wing and extended back to just in front of the leg. These hash marks were distinctly spaced and separate. There was also a separate white mark just above the leg.

The bird was swimming in a group of Common Goldeneye and this allowed a direct comparison between this bird and adult and sub-adult Common Goldeneye. The field mark that I saw first was bird's head markings. The bird's head was dark with a purple iridescence. The Common Goldeneye had a distinctly green tone to their heads. This bird had a white crescent shaped mark between the bill and the eye that looked like an upside down comma. This mark was very distinct and sharp edged. The adult Common Goldeneye all showed an oval white mark in this location. The juvenile Common Goldeneye had marks that were not always oval, but they were not distinct and sharp edged.

The markings on the bird's sides and back were also markedly different than those of a Common Goldeneye. The white breast and sides of a Common Goldeneye are thicker and continuous from the chest back to the leg. This bird had a black vertical mark that extended down from the black back at the front of the wing. This bird also had a very distinct margin where the black of the back met the white sides. Within this distinct black back, the bird had a series of white hash marks that were parallel to each other and very distinctly separated. The hash marks were at about a 45 degree angle with the top end being pointed toward the bird's head.

The drake Common Goldeneye did not show a distinct margin between the white sides and the back. On the Common Goldeneye, the margin area where the dark back met the solid white sides was predominately white with some black feather margins and markings. There was not a distinct line that delineated the sides and back and the white markings on their backs were not distinctly separated and completely surrounded by the black of the back.

At times, I had an opportunity to see the Barrow's Goldeneye within a couple of feet of one or more drake Common Goldeneye. When this happened, the drake Barrow's Goldeneye simply looked darker since the solid dark back extended closer to the waterline. It was also very striking how distinct the white hash marks are on the Barrow's, compared to the margin area on the Common Goldeneye.—

Daniel Jackson, Chaseburg, WI.

26 January, 2008 Doctor's Park, Milwaukee County—I made several trips since November hoping to find the Barrow's this winter, but had no luck, so I was glad to hear from the hotline that it had been seen. I used a 20-60× 80 mm scope, and observed the bird from about 250 yards. The cloudy conditions, light snow, and medium swells on the lake made for less than optimum viewing conditions, but when it popped up from behind a wave, I recognized our old friend immediately! It was similar in size and structure to nearby Common Goldeneye, but the black on the back extended farther down the sides. A black spur extended down toward, but did not reach the waterline, from the shoulder area, the

lower sides and breast were white. A series of white dots extended from the shoulder area back over the scapulars. On the side of the wing and below the scapular dots were two thin white horizontal lines. The black on the rear flanks was more extensive than on the similar location of the Common Goldeneye. Due to distance, lack of sunlight, and viewing angle, I could not detect a color or sheen on the heads of either species. Neither could I discern iris color, and distance precluded a size comparison of the two species' bills. I did note that the patch of white on the face was crescent shaped on the Barrow's rather than oval shaped. The forehead was steeper, but this characteristic was difficult to see most of the time because both species were frequently diving.—Thomas C. Wood, Menomonee Falls, WI.

24 February 2008, Sheboygan River about 300 yards upriver from the mouth, Sheboygan County—Unlike most observations of this bird which I have made on choppy Lake Michigan from 100 yards or more, this was an ideal viewing experience. The bird was on the calm river among many Common Goldeneye, the sun was at my back, no wind or fog, and it came within 30 yards sometimes. The  $10 \times 42$  binoculars were sufficient, but I also used the 20–60× 80 mm spotting scope. I saw the 7 white spots extending rearward over the scapulars from the shoulder area and the black spur separating the sides from the breast reaching about halfway to the waterline. The black from the back extended farther down the sides that it did on Common Goldeneye. There were two horizontal white stripes which varied in size as the bird changed position, and these were in the black area below the

scapular dots. The rear flank was extensively black and formed a nearly vertical separation with the white sides, the stubbier, smaller black bill in comparison to Common Goldeneye was quite obvious at this close range as was the steeper forehead. The bright yellow eye stood out on the dark head which had a purple sheen. A white crescent was between the eye and the bill. A field mark not often seen was the orange legs which could be occasionally noticed below the water.—

Thomas C. Wood, Menomonee Falls, WI.

#### IBIS SP. (Plegadis)

12 December 2007, Theresa Marsh, Dodge County—The bird observed in a small open ditch was size of a coot. Color was dark black/brown. Bird had long decurved bill. Legs were long and dark colored, toes were long not webbed or lobed. Bird was actively feeding and probing into water with bill in open unfrozen ditch (Fig. 1). Open water had pond weed and algae in it. Long de-curved bill and long legs with dark body point directly to ibis species. I could make out dark eye (brown).—Jeff Bahls, Beaver Dam, WI.

## PURPLE SANDPIPER (Calidris maritima)

23 December 2007 Carre-Hogle Park, Racine County—I learned of this bird from another person who had access to the internet and mentioned it was found on a Christmas Count. When I arrived, Eric Howe told me where to look and I soon spotted the Purple Sandpiper with a much thinner, late Dunlin. This Purple Sandpiper was plump and squat with a dark gray



Figure 1. An Ibis (sp.) was found in Theresa Marsh, Dodge County, on 12 December 2007 by Jeff Bahls.

head, nape, and mantle (Fig. 2). The upper breast was also dark gray, but there was streaking on the sides, and the belly and under tail were white. There was also some streaking below the gray on the upper breast. The upper scapulars were dark gray with black centers, and the lower scapulars were gray with white edging. The face had a faint partial white eye ring. The



Figure 2. This Purple Sandpiper was photographed along the Lake Michigan shore in Racine County on 24 December 2007 by Jerry DeBoer.

bill was shorter than the Dunlin's bill and less, only slightly, down curved. Its proximal half was orange and distal half was dark brown. The legs were a bright orange.—*Thomas C. Wood, Menomonee Falls, WI.* 

22, 23 December 2007, Carre-Hogle Park, Racine County—On 22 December visibility was poor, but I noted short, squat appearance, 8 inch length, very dark plumage; purplish-gray in color on head and back, streaked on breast and sides with the same color, medium length bill with bright orange base, (about ½ the length) and the rest dark. The bill was slightly drooped at the tip and the legs were short and bright orange in color. On 23 December I saw the same bird in the same location. Visibility was good this day, so feather patterns were evident. Color was purplish-gray on head. There was an incomplete white eye ring. Again, the breast was purplish-gray streaked with the same color streaks down the sides. The back was purplish with darker streaks. The coverts of this bird were dark with quite wide whitish fringes, standing out well against the dark feathers. The tertials were also dark with whitish fringes. The scapulars were also purplish-gray with a rusty-brown color in center of feathers. The bill was of medium length, having the basal ½ a bright orange color, standing out very well against the dark purplish forehead. The legs were short and a bright orange color through the whole length.—John Dixon, Kansasville, WI.

#### **DUNLIN** (Calidris alpina)

22, 23 December 2007, Carre-Hogle Park, Racine County—On 12 December visibility was poor, but I noted an eight inch bird, with a somewhat stocky build, a rather long blackish bill with a slight droop at the tip. Because of the fog, feather patterns were hard to discern, but the bird was brownish-gray on the head and back, had blackish streaks on back, a whitish supercilium, and rather wide, pale edges to the blackish tertials. The upper breast was lightly streaked with a light brown against a darker brown background. The lower breast, belly, and under tail were bright white. The primaries were black. The legs were blackish in color and relatively short, but not as short as a Purple Sandpiper would be. On 23 December the visibility was good and feather patterns were visible, when the same bird was seen in the same location as 22 December. The same field marks as above were seen, plus the bird had faint and limited streaking down the flanks. The scapulars, greater, and median coverts

were narrowly edged with white, giving a slightly scalloped look. Otherwise this bird looked very similar to the number 3 photo of Dunlin on page 181 of "The Shorebird Guide" by O'Brien, Crossley, and Carlson.—John Dixon, Kansasville, WI.

## WHITE-WINGED DOVE (Zenaida asiatica)

*3 December 2007, Door County*—After waiting for almost 1.5 hours, I suddenly noticed a dove appear in the spruce tree near the back of the yard (Mourning Doves had been there). Immediately the white along the edge at the wing was visible as it fanned itself on the spruce. It then flew to the feeders by the patio doors (8' or less) and fed for 5–10 minutes. In flight the black outer wings were seen. The short rounded tail, black mark below the cheek, white line on wing (Fig. 3) were all seen at close range as it leisurely fed.—*Daryl Tessen, Appleton, WI.* 

#### GREAT GRAY OWL (Strix nebulosa)

18 December 2007, Hwy 51 south of Mercer—Large gray owl with big round head and large yellow eyes. No ear tufts, white mustache. It was juvenile male based on feather molt and weight. Caught and banded owl after observing (Fig. 4)—Bruce Bacon, Mercer, WI.

#### BOREAL OWL (Aegolius funereus)

9 February 2008, my home, Bayfield County—This was a small brownish owl lacking ear tufts and having yellow irises. The upperparts were brown with white spots and the undersides



Figure 3. The White-winged Dove visiting a feeder in Door County was photographed by Roy Lukes on 6 December 2007.



Figure 4. This Great Gray Owl, being held by Zach Wilson, was captured and banded by Bruce Bacon on 18 December 2007 in Mercer, Iron County.



Figure 5. A Boreal Owl was discovered and photographed by Ryan Brady in his yard in Bayfield County on 9 February 2008.

were whitish with heavy brownish streaks. The face was grayish-white and outlined with black "frames." The forehead was heavily marked with white spots and the bill was pale, nearly horn-colored. The bird was nearly twice the size one would expect for Northern Saw-whet Owl so I suspect this was a female. See photo (Fig. 5).—Ryan Brady, Grand View, WI.

## TOWNSEND'S SOLITAIRE (Myadestes townsendi)

6 December 2007–14 February 2008, our home in Sturgeon Bay, Door County—Bird first observed on 6 December in rear of house in area of two bird feeders, and a number of trees. Mostly observed perched in a maple

tree by deck (attached to house). Overall gray bird with white eye ring, black narrow but short bill, slight white wing bar and tan/buff wing patches, long tail, thinner/long body appearance. Legs dark color, sizelength about like Hairy Woodpecker although much thinner. In 4 subsequent sightings . . . the white eye rings were visible and ID certain.—*Tom and Lucy Kile, Sturgeon Bay, WI*.

15 December 2007–1 January 2008, Lenard Street, Marathon County—Grayish overall (darker gray on its back) with white eye ring (Fig. 6). Small black bill, buffy wing markings also seen. Bird had a slender build with a longish tail for its size. The bird was about the size of a cardinal. When perched, it would sit upright . . . it



Figure 6. Townsend's Solitaire that wintered in Wausau, Marathon County, was pictured by Mary Backus on 1 January 2008.

would often sit at the very top of several trees near some crabapple trees it would feed in. Bird was tame, it would often allow close approach.—Dan Belter, Weston, WI.

## YELLOW-RUMPED WARBLER (Dendroica coronata)

2 February-29 February 2008, my home in Maribel, WI. Manitowoc County-A "bedraggled" plumage Myrtle/Yellow-rumped Warbler appeared at my bird feeders on 2 February 2008. The bird sometimes disappeared for several days, but returned especially when weather conditions made natural foraging difficult. This bird fed exclusively on the suet provided at several feeding sites, but seemed to prefer the feeder along side a platform feeder that attracts many birds (Fig. 7), but especially goldfinches and cardinals. The warbler was slimmer and slightly longer that the goldfinches that dominate the feeders in the immediate area. The characteristic yellow rump and side mark are easily seen at close range (less than 10 feet from the observer), and a small yellow mark at the top of the dark crown is also seen at close range. The sides of the bird were finely streaked, and the wing bars distinct, but not bold. The back was dark grayish drab and finely streaked. The



Figure 7. Yellow-rumped Warbler in Maribel, Manitowoc County, photgraphed by Mary Ozarowicz on 12 February 2008.



Figure 8. This Hoary Redpoll which visited the feeders of the Cutright family was photographed by Brian Hansen on 13 January 2008. It is thought to be the subspecies *Carduelis hornemanni hornemanni*.

eye-ring was split with a light colored eye line and the auriculars dark. The throat was light colored, but not yellow. The belly and under tail were light colored contrasting with the grayish drab color of the head, back, wings, and tail (but the rump is yellow). The bill was fine and pointed unlike the "finch" bill of the goldfinches. When the bird flew, it flashed white "markings" on the tail. The bird was still frequenting the bird feeders at the end of February.—*Mary Ozarowicz, Maribel, WI*.

## HOARY REDPOLL (Carduelis hornemanni)

22 January 2008, Cutright home, Ozaukee County-After a partial view (behind feeder part of time) of a possible 2<sup>nd</sup> Hoary Redpoll, we finally saw the paler Hoary Redpoll (2 hour wait). Noted were the size (same as the many Common Redpolls); the yellow bill which appeared shorter and smaller than Common Redpolls; the face which looked "pushed in," and had less extensive black, mostly noted on the throat; a smaller circle of red on the crown; much paler cheeks and nape; almost unstreaked on the flanks (only a few very fine streaks); breast and undersides pale buffy white (much whiter than any Common Redpoll); under tail coverts white and no obvious streaking noted (if streaked, it was minimal and not noticed as on the Common Redpolls); only one quick glimpse of the wings revealed much more white; 2 wing bars, secondaries, and paler coloring than the darker brownish of Common Redpolls; rump was not seen.—Dennis Gustafson, Muskego, WI. [See Fig. 8.]



Peregrine Falcon by Tom Sykes

## WSO Records Committee Report: Winter 2007–2008

#### Jim Frank

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The WSO Records Committee reviewed 24 records of 13 species for the winter 2007–2008 season. Sixteen of the records were accepted. Eleven additional old records were evaluated with six of these being accepted. The most unusual of the season's records was the state's third Townsend's Warbler.

#### ACCEPTED RECORDS

#### Eider (sp.)—

#2008-001 Milwaukee Co., 5 January 2008, Gustafson.

This large, brown duck was larger than the scaup and goldeneye present and "at least as large as the White-winged Scoters" in the raft of ducks. Its "uniform tan or pale brown" color was paler than the Black and White-winged Scoter females. The forehead was higher, tapering to the bill more quickly than the profile of a female Canvasback. When the bird was preparing to dive, expansion of the wings revealed no white in the wings. The distance precludes going any farther than indicating this to be a female eider of uncertain species.

#### Barrow's Goldeneye—

#2008-002 Pierce Co., 13 January 2008, Jackson.

#2008-007 Milwaukee Co., 26 January 2008, T. Wood.

#2008-008 Sheboygan Co., 24 February 2008, T. Wood.

These drake Barrow's Goldeneyes were observed to have a dark, even purplish head with a crescent-shaped, white, facial spot, a steeper forehead than the Common Goldeneyes, black extending down the flanks encompassing white spots (instead of white extending up the edge of the back encompassing black spots). This black extended down even farther at the shoulder area than along the flanks.

#### Ibis (sp.)—

#2007-105 Dodge Co., 12 December 2007, Bahls (photo).

This coot-sized bird had long legs and a long, dark decurved bill. Its overall coloration was brownish. No white outline of the dark colored facial skin area was evident on the photograph. The indistinguishable nature of immature ibis plumages leaves this species unidentified.

#### Spotted Sandpiper—

#2007-104 Racine Co., 9 December 2007, Fare.

This winter-plumaged bird had an unmarked, white breast, with a wedge of white extending up into the brown of the shoulder, yellow legs, a dark-tipped yellowish bill, and the typical bobbing body motion of a Spotted Sandpiper.

#### Purple Sandpiper—

#2007-102 Racine Co., 22, 23 December 2007, Dixon (photo); 23 December 2007, T. Wood.

This squat, medium-sized Sandpiper was very dark (purplish-gray) in color. Streaks of similar dark color were noted on the flanks and breast. The medium length bill was orange with darker distal third. The relatively short legs were also orange.

#### Dunlin-

#2007-103 Racine Co., 22, 23 December 2007, Dixon (photo).

This medium-sized sandpiper had a relatively long, dark, slightly downcurved bill.

The overall color was brownish gray with a whitish supercilium. The upper breast was heavily streaked with gray-brown, but the lower breast and belly were white. The legs were dark and not as short as those of a Purple Sandpiper.

#### White-winged Dove—

#2007-094 Door Co., 25 November–5 December 2007, Lukes (photo), December 2007, Tessen.

This photo of a Mourning Dove-like bird differed in its reddish iris, pale blue periocular skin, black cheek marking, and lengthy white front edge to the folded wing.

#### Great Gray Owl—

#2007-106 Iron Co., 18 December 2007, Bacon (photo).

This photo of a captured bird showed the large overall size, pale eyes, lack of ear tufts, concentric rings on the facial disks, and white moustache below the bill.

#### Boreal Owl-

#2008-004 Bayfield Co., 9 February 2008, Brady (photo).

This small owl had no ear tufts, and dark outline to the light facial disks, a light-colored bill, and white spots on the forehead rather than streaks as a Saw-whet Owl would have.

#### Townsend's Warbler—

#2007-096 Jefferson Co., 22 December 2007, Wanie (photo).

Photographs of this bird at a feeder reveal a warbler similar to a Black-throated Green warbler, but differing in having a dark olive auricular patch outlined by thick, bright yellow superciliary and cheek lines. In addition, the black flank streaks are set against a yellow upper breast instead of an entirely white breast.

This is Wisconsin's third record and second consecutive year with a record. Previous dates were 5–12 December 1993 and 29 October–4 November 2006.

#### Hoary Redpoll—

#2008-006 Ozaukee Co., 13 January 2008, B. Hansen (photo), 22 January 2008, Gustafson.

In comparison to adjacent Common Redpolls, this individual was ex-

tremely pale in overall color. Its yellow bill was smaller and shorter than the bills of the Common Redpolls. The flanks were virtually unstreaked, as were the white undertail coverts. In addition, the red on the forehead was smaller in diameter.

#### RECORDS NOT ACCEPTED

#### Eider (sp.)—

#2008-001 Milwaukee Co., 5 January 2008.

The entire description of this duck was that it was "brownish", had a rounded head, and larger than scoters in the vicinity. It was indicated that the bird dove so frequently that a "clear look was never had." Markings on the bird were admitted to not be discernible and no indication of bill shape was made.

#### Barrow's Goldeneye-

#2008-003 Sheboygan Co. 16 January 2008.

This report of a pair of birds was extremely limited in wording. The entire 8 word description of a female Barrow's Goldeneye consisted of "short, stubby yellow bill, steep forehead, brownish body." No indication of the type of bird (duck), size of bird relative to other ducks or birds present, nor color of head were given. The body coloration seemed unexpected. Without more information these few words might more appropriately describe a Sora. Obviously that isn't what the observer intended to describe, but more information is essential to provide appropriate "evidence" that the bird was accurately identified. The male was also not given basic descriptive information before indicating it had a "white crescent on sides of face," "black bar extending down from side," and "large white spots on upper back." With no other information to complete this report, the identification from the few words is not possible.

#### Pacific Loon—

#2007-098 Sheboygan Co., 1 December 2007.

This loon had a "small bill," smaller body, dark back, and clean demarcation between the front and back of the neck. We are left to assume the front of the neck was white and the back of the neck was dark. There was no specific indication whether the bill was straight or upturned, and no indication as to the extent of the white on the face reaching above or below the eye. Without more information, the possibility of a non-breeding Redthroated Loon isn't addressed. If the identification was taken as far as Pacific Loon, no notation of any white or lack of it at the flank waterline is present to rule out Arctic Loon.

#### Glaucous-winged Gull—

#2007-093 Milwaukee Co., 17 December 2007.

This large, bulky gull was noted because the outer primaries lacked the expected black coloration of a Herring Gull. Instead they appeared to be a slightly darker gray than the mantle color (a gray color a shade darker than a Herring Gull?), with a single white spot on P10, along with a faint "string of pearls" effect on the outer primaries. In addition, the wingtips extension beyond the tail was shorter than on a Herring Gull. The bill was yellow, but the relative size and the existence of a significant gonydeal angle

remained questionable in the observer's mind.

The identification of a Glaucous-winged Gull is always complicated by the prevalence of hybridization with Western Gulls, Herring Gulls, and even Slaty-backed Gulls. Without a more complete look at the head, and perhaps the use of photographs, it can be hard to settle on an identification for these birds. Otherwise the most consistent species for this report at this point is Glaucous-winged Gull; however, hybrids aren't ruled out.

#### Slaty-backed Gull—

#2007-100 Racine Co., 23 December 2007, (photo).

This report was in the same time frame as a report of a Lesser Blackbacked Gull by this observer. It too had a dark mantle, heavily streaked head, and pink legs. It was felt to be larger than the Herring Gulls, but the degree of the difference was not indicated other than to say it wasn't larger enough to be a Great Black-backed Gull. The size and structure of the bill was not compared to the Lesser Blackbacked or Herring Gulls present. While preening it was noted that there were white spots on P10 and P9, but the white crescents expected on the sixth through eighth primaries were not referenced. The photos were not clear and the angle of view was of a standing bird viewed from the front.

One would expect the larger size and more robust posture would have been evident if the second bird was a Slaty-backed Gull. Pink legs are seen in immature Lesser Black-backed Gulls, rendering that trait alone non-diagnostic. In addition to the white spot on the tenth primary, there can be a smaller white dot on the P9 of a

Lesser Black-backed Gull and a slightly larger white spot on the ninth primary of a Great Black-backed Gull. Without more information about partial white crescents on primaries 6–8 ("string of pearls"), there isn't enough to exclude a Great Black-backed Gull from consideration in this identification. The size reference seems to exclude an immature plumage of a Lesser Black-backed Gull, which could exhibit pinkish legs.

#### Clark's Nutcracker—

#2008-005 Dunn Co., 22 February 2008.

This brief, 30 second observation at close range is very intriguing. A gray, thin, jay-sized bird was reported to have a "long, dark bill," dark wings, and "white on the tail." In addition, there was specifically "no dark coloring on the head." Although much of this information is consistent with a nutcracker, the characterization of this bird as jay-sized, but thinner is a bit unexpected. The Clark's Nutcracker appears a bit stockier than a Blue Jay. The thought of a slender grayish jay brings to mind a Mockingbird. This bird was seen in flight; however, no mention was made of white in the wings, something both a Mockingbird and a Nutcracker should exhibit.

#### Varied Thrush—

#2007-095 Grant Co., 14 December 2007.

Described as a robin-sized beige bird with a tan back, this bird had no wingbars, no facial markings, and no breast band. The only other marks noted were gray edgings to feathers on the breast and sides. Without a bill shape, it is difficult to categorize this bird. The lack of wingbars, breast band, and

facial markings are inconsistent with a Varied Thrush. The general coloration could raise the question of a species of southwestern thrasher. The gray edgings to the flank feathers raise the possibility of a young bluebird, but the tan overall color doesn't match. There just isn't enough to go on to make reasonable speculation as to the identity of this bird.

#### Indigo Bunting—

#2007-097 Dane Co., 30 December 2007.

Due to the brief flying-across-theroad look, the description of this bird was limited to a sparrow-sized bird with "all dark feathers" with blue highlights on the open (in flight) wings. No contrasting coloration was evident.

The brevity of this look allowed no look at the bill shape to aid in categorizing this bird. The size is suggestive of a possible bunting, but the overall "dark feathering" with only a "highlight" of blue on the wings seems unexpected. The wings are the darkest color on an Indigo Bunting, so the lack of blue on the body, but some hint of blue on the wing is odd. The highlighting effect almost suggests the iridescence of a blackbird, however the size of the bird doesn't support this thought. "All dark feathers" leaves a variety of hues possible, perhaps allowing for a young bluebird to fit the description if the size of the bird was inaccurately portrayed.

#### OLD RECORDS—ACCEPTED

#### Long-tailed Jaeger-

#2006-067 Douglas Co., 22 September 2006, R. Johnson.

In comparison to an associated Par-

asitic Jaeger, this immature plumage bird was a bit smaller and more narrow-winged. Its color was overall a light brown with extensive white underwing flashes and a whitish head.

#### Black-headed Gull-

#2006-104 Douglas Co., 30 September 2006, R. Johnson.

This gull was slightly larger than associated Bonaparte's Gulls, but similar in having a white head, white tail with a black terminal band. It differed in having a brownish carpal bar rather than black, and had a wider black leading edge to the outer wing. The white on the outer primaries was restricted to the second and third primaries. The trailing edge of the wing had a larger black area compared to that of the Bonaparte's Gulls. In contrast to the limited black on the underwing of the Bonaparte's, this gull had extensive black on the outer half of the primaries with a lesser, but prominent black edge to the secondaries as well.

#### Slaty-backed Gull—

#2006-069 Douglas Co., 17 November 2006, R. Johnson.

This dark gray-mantled gull was the same size as associated Herring Gulls, with a larger then expected white tertial crescent. The bill was yellow, similar in length, but thinner than that of the Herring Gulls. The gonys lacked any thickening. The legs were pink.

#### White-winged Dove—

#2006-038 Brown Co., 4 July 2006, T. Wood.

This pale brown dove differed from a Mourning Dove in having a white line along the ventral border of the folded wing, a turquoise periorbital ring, and had a somewhat shortened, more rounded tail than a Mourning Dove. No dark markings were seen on the nape nor on the wing coverts.

#### Chuck-will's-widow-

#2007-107 Jackson Co., 13 July 2007, I. Baumann.

Heard calling, the first "chuck" note was not audible until the observer was closer to the bird. The "will's-widow" portion of the call descended down, with the "widow" portion being very quickly vocalized. In comparison, a Whip-poor-will's call would finish on a note going back up the scale.

In flight, this larger than expected goatsucker had rounded, bent wings, a long, wide tail, and a larger rounded head. Prior to taking flight it was perched horizontally on a branch, appearing to be almost crow-sized.

#### Kirtland's Warbler-

#2006-105 Marinette Co., 9 June 2006, Kavanaugh.

This loudly singing warbler had a bright yellow throat, breast, and belly with black streaks along the side of the throat. The gray head exhibited a broken white eyering and dark lores. The gray back had darker streaks on it. Also evident were two white wingbars.

#### Hoary Redpoll—

#2006-106 Douglas Co., 17 November 2006, R. Johnson.

Seen in a flock of Common Redpolls, this individual was markedly lighter than the other bird. The streaking on the flanks was restricted to just a couple of marks; the rump and undertail coverts were white, devoid of any streaking.

#### OLD RECORDS—NOT ACCEPTED

#### Pacific Loon—

#2007-101 Douglas Co., 29 October 2007.

Seen in direct comparison with a Common Loon, this loon was distinctly smaller, with a smaller bill and more rounded head. The front of the neck and face were white, the back of the neck and top of the head were described as gray. No white was visible above the water line at the flank eliminating an Arctic Loon from consideration.

Without a mention that the bill was straight, not upturned as would occur in a Red-throated Loon, this species isn't eliminated from consideration from this description.

#### Ferruginous Hawk—

#2007-099 Marathon Co., 5,6 October 2007 (photo).

A photo was presented of a pale buteo perched at very close range. Markings can be highly variable on buteos, so reliance on them can be a problem when evaluating immature birds. The ultimate identification as an immature Red-tailed Hawk was based on the head shape and beak length. The photograph did not have the elongation of the head and flattening of the crown seen on a Ferruginous Hawk. In addition, the beak did not have the elongated gapeline that extends back under the eye on a Ferruginous Hawk. The lighter then usual lower breast streaking would give an observer reason to pause, but the structure of the bird would resolve the identification of this difficult to distinguish plumage.

#### Pomarine Jaeger-

#2006-062 Douglas Co., 23 September 2006.

The limited description consisted of a Ring-billed Gull-sized all dark jaeger, with light patches at the base of the primaries. The wing width seemed wider than anticipated for a Parasitic Jaeger. No information about flight characteristics nor body bulk was supplied.

Immature Pomarine Jaegers are unusual this early in the fall and without other supporting information, the variance in Parasitic Jaegers in wing shape depending on flight speed make this identification a bit tenuous.

#### Western Kingbird—

#2007-107 Kenosha Co., 18 May 2007.

The description of this bird was limited to a bird having a light yellow chest and dark tail feathers with white evident on the outside edges of the tail. No size, shape, group identity was given. Without more information, this limited description could also fit a pipit, meadowlark, Blue-winged Warbler, Hooded Warbler, etc. Unfortunately, this probably was actually accurately identified; the evidence was lacking, however.



Killdeer in distraction display by Tom Sykes

#### WSO Awards—2008

The Board of Directors of the Wisconsin Society for Ornithology presented three awards on Saturday, 17 May 2008 at the annual convention held in Mequon.

#### BRONZE PASSENGER PIGEON AWARD

The Bronze Passenger Pigeon is given to individuals who have made exceptional contributions to the study and appreciation of birds outside of service to WSO, particularly at the state or local level. The 2008 Bronze

Passenger Pigeon was awarded to Jerry and Karen Smith (Fig. 1) primarily for their years of bird survey work. For many years they have conducted eight Breeding Bird Surveys, traveling from their home in Oconto County to several distant areas of Wisconsin. Now that they have retired out of Wisconsin, they still return to do some BBS routes. They also have served as Christmas Bird Count compilers for several counts, and were Regional Coordinators for the Wisconsin Breeding Bird Atlas. Jerry was the Spring Season field notes compiler for WSO for



Figure 1. Karen and Jerry Smith

450 WSO Awards—2008

two years. Over their years of birding in Wisconsin, they contributed numerous observations of rare and uncommon species to the records. WSO is pleased to extend its thanks for all their serve to the field of ornithology in our state and to wish them "good birding" in their retirement— wherever it takes them.

#### SILVER PASSENGER PIGEON AWARD

The Silver Passenger Pigeon Award is given to individuals who have served the Wisconsin society for Ornithology in an outstanding and dedicated manner— both in quality and length of service to the Society. The 2008 Silver Passenger Pigeon Award was presented to Robert C. Domalgalski (Fig. 2) for his years of service as the Wis-

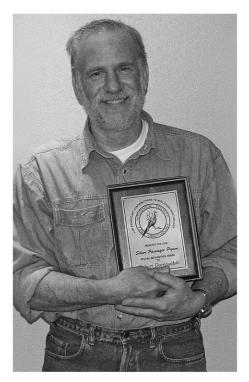


Figure 2. Bob Domagalski

consin Christmas Bird Count (CBC) state coordinator and editor of the CBC report each year in The Passenger Pigeon. In additional to coordinator for the state, Bob serves as compiler for three counts and as a participant in numerous other counts each year. Bob also has served over ten years on the WSO Records Committee and was the Regional Coordinator during the Wisconsin Breeding Bird Atlas for Washington County. His own personal survey work made Washington County one of the best surveyed counties in the state. He also keeps track of "early arrival" and "late departure" dates for the birds that migrate through our state, as well as keeping the records organized and available for "out-ofrange" observations in Wisconsin and the Mid-continent area. WSO is most pleased to extend its thanks and appreciation to Bob Domagalski for his careful and thoughtful years of service to WSO.

#### CERTIFICATE OF APPRECIATION

The Certificate of Appreciation is given to individuals who have already received a Silver Passenger Pigeon Award but continue to serve WSO in various capacities. The 2008 Certificate of Appreciation was awarded to Thomas K. Soulen (Fig. 3) for his continuing service as Summer Season Editor. Tom joined WSO in 1953 and began assisting the Society in 1961 when he became Spring Season Editor and May Day compiler, serving in these tasks until 1966. In 1982 he returned to the job of seasonal editor when he took on the task of compiling the Summer Season, doing so until 2007. He was awarded the Silver Pas-

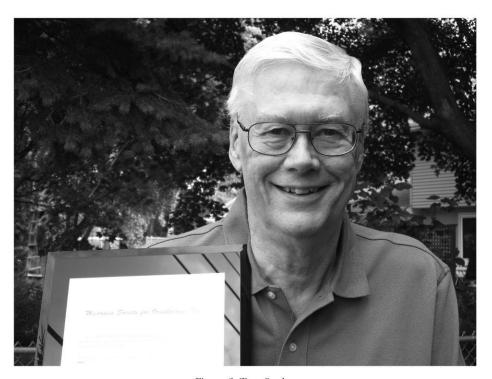


Figure 3. Tom Soulen

senger Pigeon in 1992. Tom also has run Breeding Bird Survey routes and participated in Christmas Bird Counts. WSO is deeply grateful for all his years of dedicated service to our Society and to the birds. We wish him many happy years of "relaxed" birding in his retirement.



Wilson's Warbler by Tom Sykes

# Report of the Annual Meeting 17 May 2008

# MINUTES OF THE 2008 ANNUAL BUSINESS MEETING OF THE WISCONSIN SOCIETY FOR ORNITHOLOGY

Echoes of a pounding gavel reverberated throughout the PieperPower Education Center, in Mequon, as President David Sample called the annual meeting of the Wisconsin Society for Ornithology to order at 12:00 pm on Saturday, 17 May 2008. "Welcome to WSO's 69<sup>th</sup> Annual Convention, 'Birding Southeast Wisconsin'," Sample said. "It happens to be the same age as our wandering Awards chair."

Since there was no printed agenda, Sample began a review of the "Wisconsin Society for Ornithology, Inc., Annual Report to Members, May 2008," which had been distributed to members.

WSO Treasurer Christine Reel summarized the annual financial report, placing emphasis on four points. First, the Society is still in line with where it should be; that is, costs more or less equaled income in 2007. That balance, Reel explained, was partly because more WSO members are choosing to receive eBirder, the electronic version of Badger Birder, thus saving the Society the costs of printing and mailing. Second, WSO members have outdone themselves with donations. The Honey Creek nature area, for example, with the help of Carl Schwartz, received generous support. "The Society thanks you and loves you." Also during 2007, WSO introduced the Duck Stamp program. "WSO members," Reel asked, "please support wetland preservation programs by purchasing a 'Migratory Bird Hunting and Conservation Stamp' from WSO. Your entire purchase price goes to support habitat acquisition." Finally, Reel said, the financial position of WSO at the end of 2007 left about \$81,000 to pay for expenses in general. The remainder of finances was restricted to spending within endowments or grants.

The next two pages of the financial report, Reel said, which cover restricted revenue and expenses, are too much to absorb right now. "If you ever have any questions, you can contact me." The grants administered by WSO are listed in the report. Although the Society does pay for administering grant funds, interest income from these holdings has compensated for that. Over the past year, interest and dividends increased exponentially because of investment in money market funds. This increase is no longer happening.

The real financial picture for WSO, that is, in which category funds are held and the totals for the past few years, Reel said, appears on the final page of the report, "WSO Balance Sheet as of 12/31/07." "Are there any questions?" Where, it was asked, were these funds held within the overall fi-

nancial system? Endowment funds and savings, Reel said, operate in the M&I money market. The mutual fund is Vanguard, and the standard fund is at Vanguard. Some funds are kept in M&I so they remain more liquid.

President Dave Sample said, "You have no idea how hard [Christine] works." WSO members applauded.

The minutes of the last WSO business meeting, held in Richland Center in May 2007, had been approved by a reading committee and were published in the Fall 2007 issue of *The Passenger Pigeon*. Sample thanked reviewers Bill Brooks and Jesse Peterson, who had to be enlisted at the last minute due to the Secretary's delay in composition. Chuck Heikkinen and Delia Unson agreed to review the minutes of the current annual meeting.

The business meeting then heard comments from WSO officers on their respective annual reports.

President Dave Sample extended every WSO member's thanks to the WSO Convention Committee. It was Jeff Baughman's idea to have a standing committee to organize these annual meetings, Sample said, and it turned out to be brilliant.

Sample then said "thank you" to WSO members for the chance to be the Society's president. "This is my last meeting as president," he said, "and it's been fun. You have an amazingly dedicated group of Board members," Sample said, and he thanked them, too.

WSO is proceeding with another edition of *Wisconsin's Favorite Bird Haunts*, Sample said, and "we all thank Daryl Tessen for single-handedly taking on this task." WSO members applauded. *Haunts* is a unique bird

book, Sample said, and it's exciting to have a new edition.

Another exciting development of the past year has been the verification of Kirtland's Warbler nesting in the State of Wisconsin. WSO, Wisconsin Department of Natural Resources, and the US Fish and Wildlife Service are setting up special field trips to see the warbler this spring.

WSO had been given a tape that recorded Fred Hamerstrom's introductory lecture to "gaboons" before an annual survey of Greater Prairie-Chickens in the leks outside of Plainfield. We're converting the tape to a more secure audio format, said Sample, possibly to a CD, and hopefully available to all on the WSO website.

In closing, Sample gave his thanks to some new WSO contributing members: Lennie Lichter ("I don't even know what he looks like—he lives in the outback somewhere") replaced Jennifer Davis as WSO Website master; Kay Kavanaugh volunteered to compile winter field notes for The Passenger Pigeon; Kim Kreitinger took over Big Day counts; and Bob Domagalski continues to be indefatigable in his recordkeeping of the birds of Wisconsin. Thanks to Tom Soulen for his years of service and to Randy Hoffman for taking over for him as summer season field notes editor for The Passenger Pigeon.

Vice President Jesse Peterson said, "See you next year at Crex Meadows."

WSO co-Editor Bettie Harriman gave "big thanks" to Tom Soulen and Mark Peterson for over 75 years of contribution as seasonal editors for *The Passenger Pigeon*. WSO members applauded. The next issue of *Passenger Pigeon* is in the mail, Harriman said, and you'll see the Kirtland's Warbler

on the cover and its nesting in Wisconsin as the lead article. Also, there's an article on Barron County birds by Craig Faanes.

We do have a color fund for photo prints in *The Passenger Pigeon*, Harriman said. It takes more money to print in color, and we keep costs down by placing all color photos in one signature (16 pages). Do keep contributing to the *Pigeon* color fund if you like the color pictures.

Next, the business meeting heard additions to the WSO committee chairs' annual reports.

Awards Committee chair Daryl Tessen said that WSO would present several awards to deserving people at the banquet tonight. "Come and see," he said.

Tessen said that he was working on the fifth edition of *Wisconsin's Favorite Bird Haunts*. Rick Robbins, again, was working on the maps, and there were four artists (Tom Schultz, Jeanne Perry, Tom Uttech, Dave Kuecherer). If you are an author, Tessen said, you know the deadline is 1 September; please get the material in before then, if you can. It's dated material and will be out next year. We're hoping it's as good as or better than the last.

There's a Ruff in Green Lake County, Tessen added.

WSO Bookstore Manager Don Reel had been in the business for a long time, said President Dave Sample, and was ready to give up the ship. But now he's willing to try it on a reduced basis.

WSO Field Trips co-chair Tom Schultz said that the Kirtland's Warbler field trip letter had been sent out to a limited number of people, the upcoming WSO field trip was at Kettle Moraine, and the 2009 WSO tropical birding tour to Costa Rica was being set up now.

Next year, Schultz said, he and cochair Jeff Baughman would be working on pages for the WSO website, including maps and the like, telling exactly where they are.

Make sure you fill out the comment forms for the Convention Committee, Schultz said. One addition this year that was prompted by suggestions was the inclusion of box lunches for the pre-convention field trips. Keep the comments coming.

Schultz then voiced appreciation for the good local leaders at this year's convention; he noted pre-convention help from Eric Howe and Wayne Rhode.

Historian Noel Cutright reiterated comments on WSO's getting a tape of Fred Hamerstrom's lecture to the Prairie-Chicken gaboons. The Cofrin Center for Biodiversity at the University of Wisconsin-Green Bay, he said, has a permanent room for WSO records. Wisconsin bird clubs have contributed a wonderful set of records for WSO archives. We got 14 boxes just the other day, he said, from the S. Paul Jones Bird Club in Oconomowoc. If you know about any extant bird/ornithological records in Wisconsin, Cutright said, they are not to be tossed. WSO has room for historical information.

Membership chair Jesse Peterson said that WSO membership in 2007 had dropped slightly, mainly because the rate of new members' joining was below that in the past. "If you know someone who is a birder and not a WSO member," Peterson said, "please inform that person about WSO. Take a WSO brochure, if you want."

Peterson then called attention to

the *Badger Birder* and the efforts of Mary Uttech. "It takes a whole lot of effort to put this newsletter together," he said, "not only the version to be printed but also the version for *eBirder*, which takes a different form. Getting *Badger Birder* as *eBirder* also saves money," Peterson said, "about \$7.50 per member recipient."

WSO Publicity chair Ursula Petersen said that WSO can now send mail-able display boards to bird/nature festivals. WSO can be advertised in more than one place at any one time. The displays, "a great development," she said, were made by Judith Huf, whom she asked to stand for members' applause.

Youth Education chair Barbara Duerksen thanked WSO members for their support of youth grants.

President Dave Sample said that Bill Mueller, Andy Paulios, and Steve Betchkal had served as the WSO Nominating Committee to propose people to fill WSO officer positions in 2008/09. The committee, he said, nominated Tom Schultz to serve as WSO Vice President, and the remaining officers to stay in their present positions, that is, Christine Reel as Treasurer, Jane Dennis as Secretary, and Bettie and Neil Harriman as Editors. It was moved and seconded that the nominated individuals be elected to WSO office. The motion carried. Sample pounded the gavel once, and handed it to Jesse Peterson, who assumed the responsibilities of WSO President.

"Thanks, Dave," Jesse Peterson said to retiring WSO President Dave Sample. "The people and organization of WSO have benefited from your leadership."

"Now we will delay the afternoon

workshops," Peterson went on, "and spend the first 2 hours of the afternoon going over the history of wandering Daryl Tessen."

"Is there any new business?" Peterson stated that WSO was proud to remain active in Wisconsin bird and habitat conservation, now as a permanent member of the Wisconsin Bird Conservation Initiative Steering Committee. Peterson then recognized Christine Reel for handling the money for WSO and being an asset to bird conservation in Wisconsin. WSO membership responded with double applause.

The Important Bird Areas of Wisconsin [Yoyi Steele, ed. (Madison: Wisconsin Bird Conservation Initiative, Important Bird Areas, 2007)] book is available at the bookstore, Peterson said, and the International Migratory Bird Day poster is also for sale. WSO as an organization is a contributing member of Partners in Flight, which last year sponsored a trip to Ecuador for bird conservation and offers shade-grown coffee. "You, too, can give money for birds for conservation."

A WSO member commented on conversation overheard on the preconvention bus trip. WSO officers are NOT an in-group, it was said. Although they may seem to be somehow pre-selected, that's just not so. You have to speak up. You have to say that you're interested. Tell someone—an officer, a committee chair, a committee member—that you can and will do a certain task, that you want to volunteer.

WSO members were reminded, "We need volunteers for the Convention Committee."

President Jesse Peterson asked that

the 2008 WSO business meeting be adjourned. It was so moved, and the motion was approved. The meeting closed at 1:00 pm.

Jane Dennis, Secretary

#### FINANCIAL REPORT—2007

WSO's Policies (adopted April 2005) state that annual dues payments shall cover the cost of membership services—that is, all costs in providing The Badger Birder, The Passenger Pigeon and other direct membership benefits, and the costs associated with maintaining membership and soliciting renewals and new members. The breakdown of those costs during 2007 is as follows:

#### Pigeon—

Expenses for 2007 (5 issues) totaled \$25,749 (not including color printing); pro-rated expenses (if the usual 4 issues had been paid \$20,599 for)

#### Birder—

-	
membership services	\$28,420
Total cost of	
Membership expenses	\$1,118
publication costs	\$27,302
Total usual	
11 issues)	\$6,703
Expenses for 2007 (the us	sual

Membership dues received \$27,530 Library subscriptions/ back issues \$1,101

Total membership-related income

\$28,631

The costs of membership services membership income roughly equal during 2007. This achievement is in part thanks to

Membership Chair Jesse Peterson and Birder Editor Mary Uttech for making electronic delivery of The Badger Birder possible, and the nearly 300 members who save the organization printing and mailing costs by receiving it.

Your generous support of WSO continues, and donations during 2007 amounted to \$17,828, including \$6,254 in support of Honey Creek, our Baraboo Hills nature preserve. It is owing to your generosity that WSO currently is in a solid financial position. Thank You!

During 2007, the Board of Directors implemented a program offering Migratory Bird Hunting and Conservation Stamps ("Duck Stamps") for sale. Purchase of a stamp provides a contribution to wetland conservation, with 98% of the proceeds going directly to the purchase or lease of wetland habitat through the national wildlife refuge system. WSO buys the stamps on a consignment basis and sells them at no profit, so your entire purchase price goes to support habitat acquisition. We also offer reusable plastic holders so you can display your Duck Stamp. During the first year of this program, 116 Duck Stamps were purchased, resulting in a contribution of \$1,740.

Of the total assets as of 31 December 2007 (\$490,826—see III. WSO Balance Sheet as of 31 December), the amount available to cover general operating expenses is \$81,197; the remainder is restricted. All of the amounts listed as received in Restricted Revenue in Part I, as well as in II. Grants Administered by WSO and Other Non-budget Projects must be reserved for their intended uses.

#### FINANCIAL SUMMARY

I. WSO Statement of Revenue and Expenses, 2003-2007

Unrestricted Revenue*	2007	2006	2005	2004	2003
Birder Adv/Back Iss	325.00	505.00	750.00	741.00	837.00
Convention	1,148.50	1,980.10	2,450.11	5,259.00	
Donations-Unrestricted	5,488.17	4,196.00	5,381.53	8,611.00	8,311.00
Hotline	37.05	478.30	25.65	25.65	
Other	1,206.11				1,665.46
Interest/Dividends	9,044.96	5,964.41	3,049.41	634.34	438.64
Membership Dues	27,530.00	25,650.00	34,365.00	34,320.00	37,058.00
Pigeon-Subscr/Back Iss	1,101.00	444.00	1,882.25	930.00	813.00
Color Fund	1,180.00	1,105.00	1,742.24		
WSO Pubs/Bookstore	2,561.73	617.65	2,781.99	3,559.93	6,486.74
Miscellaneous	67.11	950.55		5,563.92	
Total Unrestricted Revenue	49,689.63	41,891.01	52,428.18	59,644.84	55,609.84

<sup>\*</sup> Unrestricted Revenue includes some amounts that are actually restricted as to use (e.g., donations for hotline and color printing in the *Pigeon*). They are included here because your Board of Directors is committed to covering costs incurred by these programs from general operating funds if donations do not cover the costs completely.

Expenses (Unrestr Rev)	2007	2006	2005	2004	2003
Administration	2,146.43	118.92	145.83	172.91	297.92
Awards	238.66	49.00	147.00	160.00	289.00
Bird Reports Coord	91.44	115.44	292.87	433.99	156.77
Birder-Mailing	2,090.52	1,930.90	2,615.89	2,374.96	1,994.30
Printing	4,612.05	4,765.86	6,474.24	4,787.60	4,467.01
Convention			530.00	655.00	
Field Trips	31.49	52.49	59.99		
Hotline	418.77	269.76			75.60
Membership	1,118.01	1,068.74	1,946.39	1,034.08	1,437.95
Pigeon-Mailing	3,654.42	2,503.28	2,595.25	3,685.50	1,305.85
Page Comp, Printing, etc.	22,094.91	15,578.01	18,894.65	24,010.22	8,625.99
Color Printing	2,438.98	1,864.01	732.65		
Publicity	30.00		25.00	444.00	185.00
Records	170.22	154.23	125.95	151.60	166.89
Schol/Grants	3,500.00	2,375.00	1,600.00	3,000.00	2,950.00
Treasurer	499.67	517.65	563.36	358.44	529.27
Website	69.00				
WSO Pubs/Bookstore	533.68	995.00	1,131.54	1,211.10	1,048.96
Haunts 5th Edition	100.00				
Printing		562.90			7,179.30
Youth		11.42	45.99	28.97	140.36
Miscellaneous**	1,633.00	1,450.00	1,100.00	200.00	900.00
Total Expenses (Unrestr Rev)	45,471.25	34,382.61	39,026.60	42,708.37	31,750.17

<sup>\*\*</sup> Miscellaneous support during 2007:

Kemper's Woods, \$1,000

Cerulean Warbler (WSO's match of individual donations), \$308

Jocotoco Foundation, \$300

Washington Island Festival, \$25

Restricted Revenue	2007	2006	2005	2004	2003
Duck Stamps	1,953.00				
Endowment-Donations	819.40	174.27	55.00	1.00	161.00
Interest/Dividends/Cap Gains	5,084.95	2,672.94	1,518.11	54.85	43.62
Life/Patron Memberships	3,875.00	3,600.00	2,975.00	3,800.00	4,000.00
Honey Creek-Donations	934.36	1,121.00	4,741.00	1,751.00	696.00
Bandathon	5,319.62	4,966.26	5,549.50	3,140.47	2,713.73
Schol/Grants-Donations	506.00	441.00	976.00	1,931.00	2,831.54
Haunts Sales***	241.21	2,375.00	3,110.00	3,568.00	3,228.00

Total Restricted Revenue	34,721.26	75,004.97	21,201.96	14,307.32	14,406.44
Other Donations	308.00	750.00			486.55
WSO Pubs-Atlas Sales	12,483.16	56,115.67			
Youth Schol/Grants Dons	546.00	406.00	1,266.00	61.00	246.00
Interest/Dividends	2,650.56	2,382.83	1,011.35		

\*\*\* Loan to finance 4th edition of *Wisconsin's Favorite Bird Haunts* fully repaid; further *Haunts* sales funds considered unrestricted income.

Expenses (Restr Rev)	2007	2006	2005	2004	2003
Duck Stamps	2,104.61				
Honey Creek	2,400.62	4,387.21	4,455.62	4,912.52	4,013.11
WSO Pubs-Atlas Sales	1,554.58	2,345.85			
Youth Schol/Grants	1,097.64	250.00	390.00	527.00	100.00
Miscellaneous	308.00	750.00			43.00
Total Expenses (Restr Rev)	7,465.45	7,733.06	4,845.62	5,439.52	4,156.11

#### II. Grants Administered by WSO and Other Non-budget Projects, 2003-2007

Grants	2007	2006	2005	2004	2003
Atlas Mgment Income	1,432.81	1,941.90	1,382.57	62,111.68	7,486.34
Atlas Mgment Expenses	-917.50	-76,020.38	-10,079.95	-6,626.57	-25,960.09
Bird Mentor Kits Inc	751.00	3,901.00	4,281.00	231.00	
Bird Mentor Kits Exp	-2,254.34	-3,827.84	-4,769.57		
Convention Inc	8,797.00	6,297.00			
Convention Exp	-7,297.00	-6,297.00			
Costa Rica Trip Inc		7,190.00	27,000.00		
Costa Rica Trip Exp		-24,760.00	-9,430.00		
Flying WILD Inc	825.00	1,000.00			
Flying WILD Exp	-1,609.55				
Grant-Bald Eagle Inc	801.80	4,557.72	4,229.32	2,465.25	3,623.30
Grant-Bald Eagle Exp	-830.90	-4,557.72	-4,229.32	-2,465.25	-3,623.30
Grant-Nicaragua Inc					
Grant-Nicaragua Exp					-3,285.65
Grant-1 Bird 2 Habitats Inc	100.00				
Grant-1 Bird 2 Habitats Exp					
Grant-Osprey Inc				14,150.40	11,050.00
Grant-Osprey Exp	-99.92	-5,674.05	-3,722.98	-12,234.19	-6,359.46
Grant-WNV Tracking Inc	1,043.74	2,883.76	4,184.76	13,092.05	
Grant-WNV Tracking Exp	-1,160.24	-2,883.76	-4,184.76	-13,092.05	
IBA Quad 30 Campaign Inc	620.00	3,051.87	18,603.92	30,868.60	150.00
IBA Quad 30 Camp Exp	-13,280.90		-4,170.40		
MBS/CTB Summit Inc					83,416.07
MBS/CTB Summit Exp					-90,935.33
Nicaragua Field Gd Inc			570.00	1,220.00	490.00
Nicaragua Field Gd Exp	-90.00		-1,480.00	-220.00	-490.00
SRSEF Inc	1,837.42	969.51	2,799.59	1,690.71	1,353.35
SRSEF Exp		-472.50			
WBCI Gull Symp Inc				1,245.00	
WBCI Gull Symp Exp					
WBCI IBA Coord Inc		21,549.45	33,828.19	44,171.81	20,000.00
WBCI IBA Coord Exp		-20,765.12	-38,805.28	-40,343.36	-16,635.69
WBCI IBA Migr Surv Inc		7,056.00			
WBCI IBA Migr Surv Exp		-1,214.52			
WBCI PR/Nat Tr Coord Inc				48,578.63	15,525.00
WBCI PR/Nat Tr Coord Exp		-1,031.87	-625.00	-50,297.43	-12,149.33
Workshop-GWWA 2005 Inc			10,646.10		
Workshop-GWWA 2005 Exp	-703.00	-350.00	-7,791.04		
WSO/WBCI Symp Inc	7,627.89	755.00	6,401.47	2,927.00	
WSO/WBCI Symp Exp	-7,902.02	-460.87	-9,174.40	-154.07	
Misc Inc		525.00			
Misc Exp	-525.00				

	2007	2006	2005	2004	2003
Checking-WSO	9,788.81	1,750.46	735.48	2,170.45	2,924.12
Bookstore	4,601.45	5,006.34	2,127.10	4,176.07	6,805.88
Slides	1,440.41	1,362.68	1,362.68	1,539.24	7,156.64
General-Savings	37,056.24	51,480.92	57,158.58	140,606.88	78,391.40
Money Mkt	166,207.30	158,309.76	102,724.57	17,229.09	17,146.24
Endowment-Savings	23,370.77	17,886.55	14,001.41	14,158.45	10,302.60
Money Mkt/Mut Funds	65,313.06	61,252.77	54,893.43	47,220.54	43,494.39
Atlas Mgment-Savings	30.70	510.01	41,794.29	110,876.96	55,391.85
Money Mkt	28,585.71	27,591.09	60,385.29		
Schol/Grants-Savings	65.00				
Money Mkt	55,563.97	50,865.99	46,011.35		
SRSEF-Savings	65.00	5,913.25	6,101.41	5,508.11	3,817.40
CD/Money Mkt	28,535.17	20,849.50	20,164.33	18,269.25	17,793.71
Inventory-WSO Pubs	34,635.24	48,712.79	17,169.68	21,697.85	27,081.61
Slides	1,664.97	1,664.97	1,664.97	1,590.02	1,590.02
Fixed Assets (Equip/Land)	31,895.13	31,895.13	31,895.13	31,895.13	30,410.00
Total	490,825.93	485,052.21	458,189.70	416,938.04	302,305.86

III. WSO Balance Sheet as of 31 December 2007

#### ANNUAL REPORTS OF OFFICERS

President—Dave Sample—It has been a very fast two years, and now my term as WSO president has ended. I have enjoyed it thoroughly. Much of that enjoyment can be traced to the wonderful and dedicated group of WSO board members I have been privileged to work with. They are a great group, and their enthusiasm for all things "bird" in Wisconsin has been an inspiration to me. Thanks to them all.

Here is a very brief review of some of the noteworthy happenings with the WSO in the last year:

• The WSO website has seen some changes under the direction of new WSO webmaster, Lennie Lichter. One noteworthy change is the addition, through the generosity and effort of Bob Domagalski, of several of Bob's extensive bird record databases. These include the list of Wis-

consin rare bird records, Mid-continent rare bird records, and Wisconsin bird arrival and departure dates. These records are a wonderful resource to have available at the mere click of a key. Thanks to Bob, Lennie, and Bill Mueller for making this possible.

- WSO publications:
  - —Planning for the 5th edition of Wisconsin's Favorite Bird Haunts, under the tutelage of editor Daryl Tessen, is proceeding. Daryl already has a number of submitted chapters to work on.
  - —A revised edition of the *Raptors of Wisconsin* booklet is also underway. The text of the original booklet has been scanned and made into a Word document so that it can be edited and added to. We have also received permission to re-use the wonderful original drawings done by Elva Hamerstrom Paulson.
  - -And, current membership chair

Jesse Peterson has created a new, updated brochure for WSO.

- WSO sponsored last fall's Citizen-Based Monitoring Conference at the Devil's Head Resort.
- WSO contributed funds to this year's successful Washington Island Bird Festival and the Save the Cerulean workshop; we also gave a donation to the Jocotoco Foundation for bird habitat acquisition in Ecuador.
- We received a unique film of the late Fred Hamerstrom giving his annual pre-count talk to a group of prairie-chicken lek monitors up at his house in Plainfield. Historian Noel Cutright is in the process of having this film converted into a DVD format.
- There was much ornithological excitement generated last summer when several pairs of Kirtland's Warblers were found nesting in central Wisconsin. This was the first documented breeding of Kirtland's in the state. Field trip chairs Tom Schultz and Jeff Baughman have arranged for special guided field trips in summer 2008 to view the warblers, assuming they return.
- Lastly, thanks to Tom Schultz for accepting the nomination as WSO's next vice president. Tom will be working alongside incoming president Jesse Peterson to make sure WSO stays a vital organization.

Thanks to one and all. Hope to see you out in the fields, forests, and wetlands of Wisconsin.

Vice President—Jesse Peterson—As Vice-President, one of my main responsibilities is to secure the location and time for future conventions. For

2009, that task has been completed. The 2009 WSO annual convention will be held at The Lodge at Crooked Lake in Siren, Wisconsin, near Crex Meadows from Thursday, 21–24 May 2009. This will be the first time our convention has been held in that area of the state and we hope to have a great turnout.

*Treasurer—Christine Reel*—See Financial Report.

Secretary—Jane Dennis—The WSO Secretary's task of reporting and recording WSO Board discussion has been simplified of late by the use of email communication among Board members. During this past year, in addition, and with the help of other members of the WSO Board of Directors, your WSO Secretary finally figured out how satisfactorily to record these internet interjections into the official quarterly records of the Society. We had been recording email communications as "Updates" following the respective Committee reports. Although this method did get internet discussion down on paper, it also caused confusion among Board members. The first attempt at clarity was to print a section of this not-so-extraneous communication at the end of the quarterly "WSO Board Minutes" under the heading, "Email communication among WSO Board Members," of whatever date. In this manner such discussions as "Don Reel resigns as Bookstore Manager," "Honey Creek issues and hunting policy questions," and "Motion on Kemper book pricing" were entered into the WSO record. However, Board decisions that are actually moved, voted upon, and approved should probably appear on

record as something more substantial than an addendum. The Secretary decided officially to enter such validated decision-making in the Secretary's report to the quarterly meeting. Thus, in January 2008, the WSO Board Minutes were able to record that the Board of the Wisconsin Society for Ornithology had unanimously approved the immediate contribution of \$1,000 to the Community Foundation of Chippewa County for the purchase of Kemper Woods, "a project that will not only honor Charlie Kemper for all of the things he has done for the WSO and for our birds, but also help protect a woodlot that will serve as a conservation area for community use." This way of recording WSO Board decision-making action may become more prominent as the Society comes to focus more on conservation activities, which often are constrained by deadlines for contribution.

Editors, The Passenger Pigeon—Neil and Bettie Harriman—Four issues of The Passenger Pigeon were published in 2007, all were Volume 69. The final Winter Season report from Ken Lange (his 27th) appeared in Vol. 69(4). The new compiler for the Winter Season is Kay Kavanagh.

Two other long-time compilers of seasonal reports have now finished their last reports. Thomas Soulen, after 25 years, has retired as compiler of the Summer Season and Mark Peterson, after 26 years, has retired as compiler of the Fall Season. This extraordinary service to WSO and Wisconsin ornithology by Ken, Tom, and Mark is deeply appreciated by the Board of Directors and members of WSO, and by the *Pigeon* Editors. All

best wishes for many happy years of birding to each of them.

The Editors of the *Pigeon* are pleased to announce that Randy Hoffman volunteered to become the next Summer Season compiler and Ted Gostomski has enthusiastically agreed to be the next Fall Season compiler. We look forward to working with both of them.

In addition to the three seasonal compilers already mentioned, the Editors wish to extend their thanks to Randy Hoffman, Bird Reports Coordinator and author of Lessons From the Seasons; David Kuecherer, Art Editor; Karl David, Spring Season compiler; and Jim Frank, Records Committee Chair who writes the quarterly reports from this WSO committee, for their support in the production of the 2007 issues of *The Passenger Pigeon*.

We also wish to remind the membership that more art work and bird photographs are needed by the Art Editor. We know many of you are taking photos of the birds you find in Wisconsin; please remember to share your best shots with David Kuecherer for use in the *Pigeon*. The color photographs of birds are the most mentioned feature in our journal, so please continue to support the Pigeon Color fund. And finally, Editors NEVER have enough articles, so please continue to send us articles.

## ANNUAL REPORTS OF COMMITTEE CHAIRS

**Awards—Daryl Tessen**—Awards to be announced at convention banquet.

The Badger Birder Editor—Mary Uttech—Completed 11 issues of the newsletter. Bird Reports Coordinator—Randy Hoffman—Four seasonal reports to North American Birds were submitted as a part of the Upper Great Lakes Region. A "how to report bird sightings" document was printed in The Badger Birder and on the statewide birdnet. This report will quarterly appear on the birdnet and sporadically in the Birder as a reminder for newer birders.

Birders can expect to see new names on the seasonal reports in The Passenger Pigeon. Three long-serving seasonal editors finished their service to the organization: Ken Lange, Tom Soulen and Mark Peterson—all with 25 or more years of editing the seasonal reports—have retired. New editors have stepped forward to fill the void. Kay Kavanagh will edit the winter season, Randy Hoffman will edit the summer season, and Ted Gostomski will be our new fall season editor. Now for the final change—Karl David after 8 years editing the spring season will retire after this forthcoming edition. We are looking for a new spring season editor. Some work is required, but the benefits both personal and to the organization are phenomenal. If you have any interest, please contact either Bettie Harriman or me.

Bookstore—Don Reel—As of early 2008, the purpose of the WSO Bookstore was changed to only providing an outlet for WSO-published materials to WSO members and resale outlets (nature centers, bird stores, ABA, etc.). Following an unsuccessful search for a replacement Bookstore Manager during 2007, the Board of Directors agreed to reduce the offerings of the WSO Bookstore to only WSO-published materials and items that were donated to WSO with the

understanding that all proceeds would revert to WSO. In addition, procedures regarding orders from individuals were changed to require prepayment (this change does not apply to resale outlets). These changes streamlined order processing and reduced the commitment required of the Manager, and I agreed to continue in the position.

You can find a link to a pdf file of the order form now required when you place an order on the Bookstore page of the WSO website. You may also contact Don Reel, Bookstore Manager (262-547-6128), for a copy of the form.

The Bookstore continues its relationship with the online Nature Mall, and you can find the link to it on the Bookstore page of the WSO website. Remember that WSO gets credit for your order only when you go through the link on the WSO website, so please do not bookmark the Nature Mall. If your organization is interested in promoting this relationship on your website, you must provide a link to the Bookstore page of the WSO website, and not a link directly to the Nature Mall.

Sales of *Atlas of the Breeding Birds of Wisconsin* continued steadily, with a total of 408 books sold during 2007. By year end, over 2,100 copies had been sold. The next big WSO project involving the Bookstore is publication of the eagerly anticipated fifth edition of *Wisconsin's Favorite Bird Haunts*, expected to be available during 2009.

The Bookstore appeared at Symposium 2007 (sales of \$1,100) and Convention 2007 (sales of \$950). Sales for calendar year 2007 totaled almost \$19,000 (312 orders were filled). In

addition to handling sales requests, I accomplished the following:

- reorganized the Bookstore in keeping with its new emphasis;
- kept members informed of Bookstore activities via articles in *The* Badger Birder;
- submitted updated information for the Bookstore page of the WSO website;
- · attended quarterly Board meetings.

Please contact me with any concerns or requests you have about the WSO Bookstore.

Conservation—Bill Mueller—No written report.

Education—Mariette Nowak—As Education Chair, I have promoted landscaping with native plants for birds. In the last year, since our last annual meeting, I have given 32 presentations

on the subject in Wisconsin, plus 6 out-of-state presentations. Restoring native plants in our human-dominated landscapes is essential to maintaining the biodiversity of our country. There are simply too few natural areas left to sustain our birds and other wildlife species.

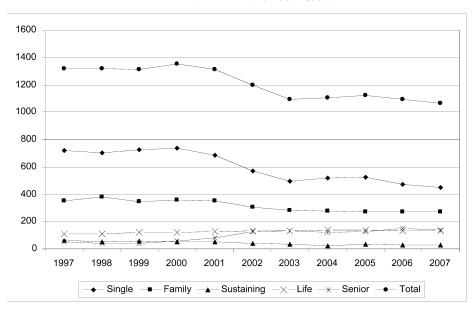
Field Trips—Jeff Baughman and Tom Schultz—No written report.

*Historian—Noel Cutright*—No written report.

Membership—Jesse Peterson—In 2007, membership again dropped slightly from previous levels but remained more or less steady relative to the previous four years. Similar to 2006, the main cause of this drop in membership was that new members joining in 2006 were significantly below recent years. The renewal rate was slightly above the five-year average.

Total Membership at Calendar Year End:

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Single	718	700	726	738	685	572	494	520	521	473	450
Family	353	380	344	358	351	304	282	275	268	268	272
Sustaining	63	51	56	50	49	40	34	25	32	30	28
Life (1 of 4)	8	9	9	10	3	2	0	2	3	2	1
Life (2 of 4)						2	2	0	1	3	2
Life (3 of 4)						1	2	1	0	1	3
Life-Couple (1 of 4)	0	0	0	0	0	0	2	1	0	1	0
Life-Couple (2 of 4)						0	0	2	1	0	1
Life-Couple (3 of 4)						0	0	0	2	1	0
Life	107	110	119	120	126	130	129	133	134	135	134
Life-Couple	0	0	0	0	0	0	1	3	3	10	10
Patron	6	6	5	6	6	7	7	8	8	7	7
Senior	49	41	41	60	79	126	131	120	129	147	141
Student					6	6	7	11	15	12	11
Honorary Life	5	4	3	3	4	2	2	2	2	2	2
Board	8	18	12	5	4	3	3	3	3	3	3
Total	1317	1319	1315	1350	1313	1195	1096	1106	1122	1095	1065
New Members							48	95	74	43	34



#### **MEMBERSHIP TRENDS 1997-2007:**

Membership activities and accomplishments throughout the past year include:

- Continued oversight of printing and mailing of *The Badger Birder*
  - —Special recognition to Mary Uttech who, as Editor of *The Badger Birder*, does a wonderful job month after month of pulling together arguably one of the best birding organization newsletters in the country.
- Continued oversight of distribution of the e-*Badger Birder*, the electronic version of the WSO newsletter, to approximately 275 subscribers
  - —The e-Badger Birder is one of the main ways we are offsetting recent membership dues shortfalls. Each subscriber to the e-Badger Birder saves WSO approximately \$7.50 per year in printing and mailing costs. These cost savings are the equivalent of approxi-

mately 69 new members at the Single membership level.

- Monitored and managed the publication exchange program
- Managed the annual membership renewal activity
- Managed the new member "onboarding" activity including sending out a "Welcome" packet to each new member

**Publicity—Ursula Petersen**—We have taken or sent one of our displays to seven events this past year. This includes the new mail-able displays made for us by Judith Huf which are being well received.

The large displays have been taken to events in person by Noel Cutright, Bill Mueller, and myself. This is preferred because we can be present to answer questions, but it is not always feasible.

Otherwise, I participated in the Society's quarterly meetings and sent the

convention publicity to two birdnets and two state newspapers (*Milwaukee Journal Sentinel* and *Capital Newspapers* Madison) early and again before the registration deadline.

**Records—Jim Frank**—The records Committee processed the following documentations for 2007 seasons:

	Records	Accepted	Rejected
E	xamined		
Winter	41	35	6
Spring	76	64	12
Summer	30	25	5
Fall	48	35	13
Total	195	159	35

The Wisconsin state list increased to 430 species with the additions of a Great-tailed Grackle (428th), Rock Wren (429th), and Green-breasted Mango (430th). The state's second Townsend's Warbler, second Great-tailed Grackle, and third Frigatebird (sp.) were also recorded.

Committee members were Bob Domagalski, Mark Korducki, Bill Cowart, Karl David, and Jim Frank.

**Research—Sheldon Cooper**—No written report.

Scholarships and Grants—Janine Polk—A Steenbock Award, intended for beginners, amateurs, and independent researchers, was awarded to:

 Krista C. Klaus, Harshaw, "Bringing Birds into the Elementary Classroom"

WSO Scholarships, to provide additional support for work that is being carried out and funded through another sponsor, were awarded to:

- Christine Anhalt, Ripon, "Effects of Territory Enhancement on Adult Feeding Rates and Frequency of Double Brooding in the Eastern Bluebird (Sialia sialis)"
- Ryan Brady, Ashland, "Winter Territories of Northern Shrikes in Northern Wisconsin"
- Dan Haskell, Houghton, MI, "Measuring the Ecological Benefits of Lakeshore Restoration for Breeding Birds in Northern Wisconsin: The Wisconsin Lakeshore Restoration Project"
- Brian Hess, Milwaukee, "The Effects of Experience on Paternity in a Lekking Bird"
- Urban Ecology Center, Milwaukee, "Monitoring Avian Migration—Use of Stopover Sites in Milwaukee County"
- Amber Roth, Houghton, MI, "Golden-winged Warbler Habitat Research and Conservation from Wisconsin to Colombia"
- William E. Stout, Oconomowoc, "An Urban Cooper's Hawk Population in the Metropolitan Milwaukee Area"

*Website—Lennie Lichter*—No written report.

Youth Education—Barbara Duerksen—Youth Grants Program—Grants are awarded in spring and fall to students for bird research or education. The WSO Youth Grant Committee awarded two grants in fall of 2007:

 Quinten Eberhardy and the third and fourth grade class students at St. Peter's Lutheran School, Schofield, received \$250 for their bird education project, "Up Close and Personal," to study how bird eggs hatch and to learn about the structures of egg shells and feathers.

 Maisie Radle and Lauren Brusoe, fifth graders at Arkansaw Public School, Durand, received \$200 for their research and education project, "Bluebird Trail in Tarrant Park."

In April 2008, the youth grant committee awarded three grants:

- Evan Barrientos received \$150 for his bird education project, "Camp Yosemite," a youth bird camp where he will study and photograph western birds and ecosystems.
- Katie Petzel of Centuria, and Haley Yunker of St. Croix Falls, received \$70 for their Northern Lights 4-H club bird education project to present information about Goldenwinged Warblers and other Wisconsin birds at a booth at the Polk County Fair.
- Quinten Eberhardy and the third and fourth graders at St. Peter Lutheran School in Schofield, received \$80 for supplies for their bird education project, "All Quacked Out," to study ducks.

Youth Education Coordinator activities of the past year:

- Held outdoor bird conservation workshops as a part of the Richland County Conservation Field Days for sixth graders, with 184 students attending.
- Continued development of the Bird Conservation Mentor Program, a joint project of WSO and WBCI to

introduce students and others to the common birds of Wisconsin and their habitats, with the use of a kit containing a scope, tripod, binoculars, field guides, a CD, and educational materials. WBCI Education Committee members produced an Educator's Guide for the bird kits, complete with activities developed for students grades 4 through 8 to learn about field guides, bird identification, issues, habitats, and how to use binoculars. The Fond du Lac County Audubon Society, the Hunt Hill Audubon Society of Washburn County, and the Retzer Nature Center in Waukesha County received bird kits. Another kit will be going to Puerto Rico in June with Wisconsin teachers as part of the Global Environmental Teachings Program of UW Stevens Point.

- Attended WSO board meetings and education committee meetings of WBCI, the Wisconsin Bird Conservation Initiative.
- · Co-facilitated a Flying Wild workshop at the Kickapoo Valley Reserve, near LaFarge. Flying Wild is a bird curriculum with activities for middle school students, teachers, and volunteers that can be used individually or in preparation for a bird festival. WBCI education committee members put on additional Flying Wild workshops at the Riveredge Nature Center near Newburg, Wehr Nature Center in Milwaukee, International Foundation near Baraboo, George W. Mead Wildlife Area near Milladore, and Northern Great Lakes Visitor Center in Ashland.

#### **About the Artist**

All the art in this issue is by Tom Sykes, a self-taught artist and amateur photographer with an avid interest in birdwatching travel. He, and his wife Carol, have traveled extensively in the United States and Canada, but mainly enjoy south of the border adventures in Mexico and Central and South America.

Tom, a long time resident of Wisconsin, is currently employed at Lawrence University in Appleton, as the Director of Media Services. He is the list manager/owner of the Wis-

consin Birding Network and a former President of the Wisconsin Audubon Council.

Tom's art has appeared in past issues of the Northeast Wisconsin Audubon Weather Friend Calendar and can be found on his website: http://www.portalscards.com/Portals/Portals.html

Tom has two grown children in Wisconsin and two grown step-children, one in Wisconsin and one in Colorado, and three grandchildren.

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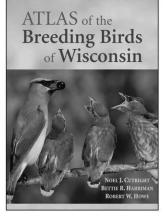
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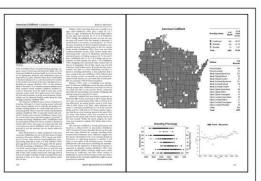
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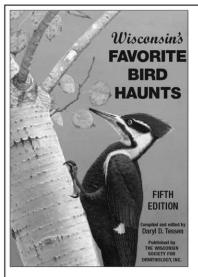
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